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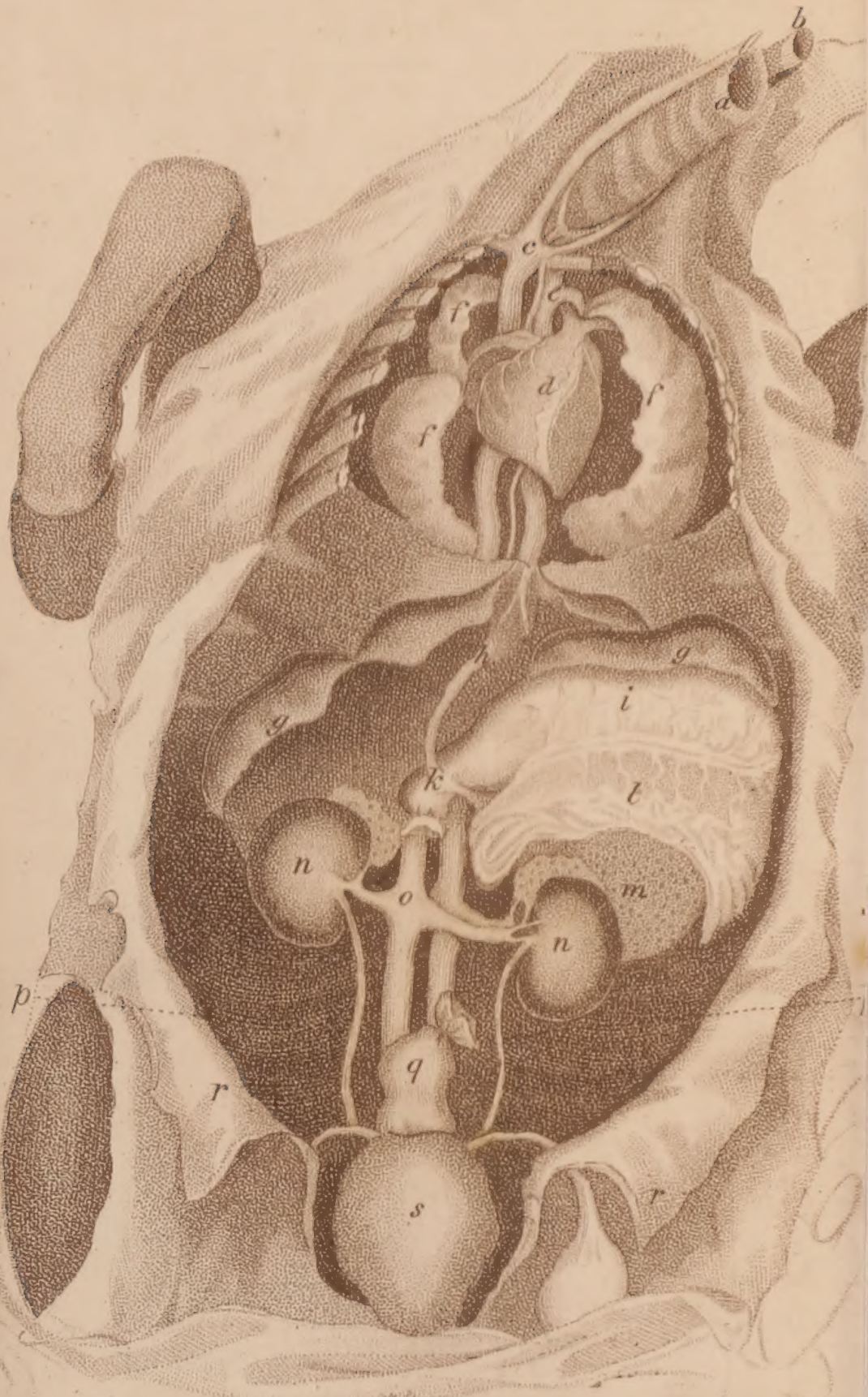
131 A Domestic Treatise on the Diseases of Horses and Dogs, so conducted as to enable Persons to practice with ease and success on their own Animals without the assistance of a Farrier, including likewise the natural management as Stabling, Feeding, Exercise, etc., together with the Outlines of a Plan for the establishment of Genuine Medicines for these Animals throughout the Kingdom. By **Delabere Blaine,** Professor of Animal Medicine, Author of "The Anatomy of the Horse," "A System of Veterinary Medicine," "A Treatise on the Distemper in Dogs," etc., etc. Third Edition. London. 1803.

211 pp. M., $7\frac{1}{4}$ in. by $4\frac{3}{8}$ in.

Anatomical plates, and coloured engraving of foot, exhibiting the nerves.

A. 1.

Hugh Cecil Earl of Lonsdale.



Printed for T. Boosey, Old Broad Street, Royal Exchange.

A

DOMESTIC TREATISE

ON THE

DISEASES

OF

HORSES AND DOGS

so conducted as to enable Persons to practice with ease and success on their own Animals without the assistance of a Farrier, including likewise the natural management, as Stabling, Feeding, Exercise &c. together with the Outlines of a Plan for the establishment of genuine Medicines for these Animals throughout the kingdom, by

DELABERE BLAINE,

Professor of Animal Medicine.

AUTHOR OF

The Anatomy of the Horse — A System of Veterinary Medicine — A Treatise on the Distemper in Dogs &c. &c.

LONDON,

Printed for T. Boosey, Old Broad Street, Royal Exchange.

1805

PROFESSIONAL Attendance on ANIMALS,

AND

Infirmary for Horſes and Dogs,

No. 5, WELLS STREET,

OXFORD STREET.

MR. BLAINE begs leave to inform his Friends that he has removed from Argyll Street to more extenſive and commodious premiſes as above, where he continues to give his advice on all the Diſeaſes of Animals in general, but particularly on Horſes and Dogs. Mr. Blaine has fitted up ſome convenient ſtalls and boxes for the reception of ſick horſes, or for the purpoſes of phyſicking, bliſtering, getting into condition, or otherwiſe attending to, as the caſe may require. Mr. B. likewiſe gives his advice abroad to any diſtance. The terms of his attendance on horſes will be regulated by circumſtances and the uſual cuſtom of Veterinarians, but they will never prove extravagant.—Mr. Blaine's well known attention to the diſeaſes of Dogs, having made him univerſally applied to thereon, his terms in this particular are as follow:

----for conſulting him at home, 5s; but ſhould a frequent repetition of his advice be neceſſary for the ſame animal, the value of the medicines only will be charged ----Conſulting him by letter, if one only, 7s; if repeated, 5s each----The charge for attendance abroad is regulated by circumſtances, as the diſtance, the number of viſits, &c. &c. In general caſes his viſits are 5s each, except when the diſtance is very ſmall, or the attendances are neceſſarily very numerous, when each other viſit only will be charged.

To afford every convenience to the Public, Mr. B. has erected on his premiſes ſome very excellent rooms, with an extenſive out-let, where dogs entruſted to him, either ſick or otherwiſe, are treated with every care and attention. The expenſe and trouble attendant make the following charges indiſpenſible:

The general caſes of ſickneſs, requiring the uſual attention and trouble, 12s per week; but if the ſtay ſhould be prolonged ſeveral weeks, this charge will be moderated.

Caſes occaſioning leſs trouble, productive of leſs expenſe, and moſt caſes remaining beyond the firſt or ſecond week, 10s 6d or 7s per week.

Puppies taken in to rear, bitches to whelp, or healthy dogs to keep, are charged from 3s 6d per week upwards, according to their ſize, &c. &c.

Attendance in the City.

For the accommodation of Gentlemen reſiding in the City, Mr. Blaine will attend, to give his advice, every Wedneſday, from 11 till 12, at Mr. Booſey's, No. 4, Old Broad Street, Royal Exchange.

PURCHASE of HORSES.

The numerous frauds practiſed in Horſe-dealing are a ſource of danger, loſs, and inconvenience to all thoſe concerned in purchaſing; and, without perſons' leiſure enables them to ſtudy all the arts put in practice, they are ever liable to deception: add to which that thoſe in want of horſes are frequently at a loſs for the moſt ready mode of procuring them.

To Gentlemen ſelecting their own horſes, Mr. B. offers his advice and aſſiſtance in trying and examining them previous to purchaſe; by which unſoundneſs, vicious habits, and bad qualities, may be detected, without riſk or trouble to the intended purchaſer.

To thoſe who may want leiſure or inclination to look out for themſelves, Mr. B., from the great extent of his connections, is always able to procure for

their inſpection any deſcription of horſe they may want; and, from invariably acting with ſtrict integrity, contenting himſelf with a very moderate charge, and being generally fortunate in procuring valuable horſes at a moderate price, his practice in this branch has become very extenſive: and he preſumes to aſſert, that purchaſers of all deſcriptions will find their intereſt in conſulting him.

INTRODUCTION.

FARRIERY, in an enlarged ſenſe (now uſually called the Veterinary Art), is the Art of curing the diſeaſes of the horſe, and other domeſtic animals; and, as theſe animals are eſſential to our comfort, ſo this muſt be a very important ſubject, and muſt intereſt every part of mankind. This art may be ſaid to be learned in two ways, which, with a little latitude of expreſſion, may be called, the one,---the *ſcientific* or *regular mode*; and the other, the *domeſtic* or *imitative mode*.

The *ſcientific mode of learning farriery* is that which all perſons intending to practiſe extenſively on the animals of others, as farriers, or veterinary ſurgeons, ſhould adopt; and without which their exertions can never be crowned with much ſucceſs, or eminence reward their labours. This mode of curing the diſeaſes of domeſtic animals can only be gained by an intimate acquaintance with *anatomy*, *phyſiology*, *chemiſtry*, *pharmacy*, and the *materia medica*. When the veterinary art is learned in this manner,

the practice of it requires no fet rules, no ready formed preſcriptions or recipes; but the mind of the practitioner is enabled to meet any caſe that may occur, and to act on it from well-grounded principles. This, therefore, is by far the moſt important and uſeful mode, and, in fact, is the only one by which either farriers who practiſe on the animals of others, or amateurs who practiſe extenſively on, and examine attentively, their own ſhould act. The importance of this ſcientific inveſtigation of the ſubject has, lately, become ſo evident, that a regular ſeminary, called the Veterinary College, has been eſtabliſhed for the purpoſe of teaching it: but it is not in the power of the greater number of thoſe perſons who may even wiſh to ſtudy farriery in this manner, to attend ſuch a length of time from their homes, or to meet the expenſes attendant on this courſe; therefore it is neceſſary to deviſe ſome other mode by which all the branches before recapitulated may be taught in a regular, ſcientific, but intelligible manner. A Work, the reſult of great experience and indefatigable application, I have been for ſome years forming, having this for its object; and which Work was, laſt year, preſented to the Public in the following form:

1802.----MARCH 1ſt.

This Day is publiſhed,

In 2 very large Volumes, 8vo., with Plates,

Price 1l. 5s. in Boards,

THE OUTLINES OF THE VETERINARY ART,

OR,

Principles of Medicine,

As applied to the Medical Treatment of the Horſe, the Ox, the Sheep, and the Dog.

BY DELABERE BLAINE,

Profeſſor of Animal Medicine, and Author of the "Anatomy of the Horſe," the "Treatiſe on the Diſtemper in Dogs," &c. &c.

London: printed for Longman and Rees, Paternoſter Row, and T. Boofey, Old Broad Street.

The object of the preſent Work is, to offer to every one concerned in domeſtic animals the knowledge of the means of preſerving them in health, and the art of removing their diſeaſes, in a manner at once inſtructive, ſatisfactory, and entertaining; and, as ſuch, intereſting readers of every claſs. The *Philoſopher*, turning his attention to that noble animal the *Horſe*, may here contemplate his natural habits, his anatomical ſtructure, and mechanical arrangement, and admire the wiſdom diſplayed in the œconomy of his organs. The *Naturaliſt*, it is preſumed, may here be led to a farther acquaintance with Nature's grand

ſcheme, by the deſcription of the formation of domeſtic animals, and the ſeveral variations in their functions, habits, and manners. *Amateurs*, lovers of Horſes, will here likewiſe find this valuable animal conſidered not in one point of view alone, but as intended for various purpoſes, with the form beſt adapted for each of theſe pointed out, and the general beauties and defects deſcribed, ſo as to enable the inexperienced to judge of theſe points for themſelves, thus reſcuing them from the impoſition of grooms and dealers. The natural treatment of animals, with the varied modes of feeding, of exerciſing, and of ſtabling---the laws and modes of progreſſion---the breeding, rearing, and perfecting---will all form points highly intereſting and uſeful to this claſs of readers. The *Agriculturaliſt*, the *Farmer*, and *Grazier*, may here likewiſe find the *Ox* and *Sheep* conſidered; and it is preſumed, from the broad ſcale on which theſe animals are viewed, theſe perſons may draw many important hints, not only relative to their treatment under diſeaſes, but of the mode beſt adapted to preſerve them in health, and to make them prove ſtill more lucrative and uſeful. The *Sportſman* will here have his attention engaged by a ſubject not before treated on,---the diſeaſes of the Dog; and which, though deſcribed in a conciſe manner, yet, as connected with the whole, will be found to prove ſatisfactory. *Profeſſors of human medi-*

cine are here offered a farther extenſion of their phyſiological knowledge, by the opportunity of becoming more intimately acquainted with the ſtructure, functions, and œconomy of domeſtic animals; and, by the application here made of the general principles of the healing art to the cure of their diſeaſes, they become enabled to give that advice, in caſes of emergency, thereon, which is often required, but ſeldom obtained; for analogy, undirected, totally fails. *Veterinarians* and *Farriers* may here learn the art they profeſs fundamentally, and from its proper baſe; by which, being taught to reaſon, to think, and to draw concluſions from well-grounded principles, they will baniſh the receipts and preſcriptions of their anceſtors, and have within themſelves the means of ſuggeſting whatever any caſe may require: from whence it may be hoped that this art, ſo long buried in oblivion, will gradually riſe to that eminence and reſpectability which its utility demands.

To form a progreſſive arrangement of its ſubjects, the Work is divided into three parts.

PART I. is appropriated to the collateral branches of the veterinary art, commencing with the hiſtory of medicine in general, and proceeding to an hiſtorical account of that branch of it, that, as applied to the diſeaſes of domeſtic animals, is termed *veterinary medicine;* or, as immediately regarding the horſe, is called *farriery;*---the particular hiſtory of this art in England; with a compariſon between Engliſh and

continental farriery:---a hiſtory of the riſe, origin, and progreſs of the Veterinary College:---chemiſtry, and its relation with the healing art:---the laws of organic life; with a comparative view of the various animals ſurrounding us.

PART II. conſiders the anatomical ſtructure, functions, and œconomy of the horſe, commencing with his exterior conformation, and proceeding to a deſcription of the internal parts; comparing them with thoſe of the ox, ſheep, and dog; and accompanying the whole with plates, illuſtrative of the ſubjects deſcribed, drawn from the ſubjects by the author.

PART III. is intended to teach the practice of this art, by a ſyſtematic arrangement of the diſeaſes of the horſe into twenty claſſes, united with a more conciſe account of thoſe of the ox, ſheep, and dog. The plan of medical treatment laid down and directed will be found entirely new; founded on reaſon and ſcience, and conformant to the late great improvements in this important branch of healing: the whole being attempted in ſuch a manner as to prove eaſy of attainment, yet fully adequate to its propoſed purpoſes.

Teſtimonies in Favour of this Work.

"Mr. B—— had previouſly publiſhed the Anatomy of the Horſe, re-publiſhed in this Work, in which he profeſſes the parts treated of have been

moſt of them taken from his own diſſections. So far he has a fair claim of originality." "The drawings appear extremely correct; are executed in the moſt handſome manner; and the deſcriptive part is very correct."

London Medical Review.

"The ſecond diviſion of the Work is occupied with the Anatomy of the Horſe, including the phyſiology, or knowledge of functions. This part of the Work is materially illuſtrated by engravings, the execution of which has conſiderable merit."

"The third diviſion is allotted to the practical part of the veterinary art, or a deſcription of the diſeaſes of the horſe, ox, ſheep, and dog, with the moſt approved modes of cure. From the length of the anatomical part of the Work, the preſent part is, perhaps, more compreſſed than might be wiſhed. The claſſification adopted by the author will materially aſſiſt the ſtudent in this branch of medicine, who is too apt to be miſled by the barbarous and unmeaning jargon adopted, in general, in books of farriery."

Med. and Chirurg. Review.

"Mr. Blaine, we believe, is the firſt who has attempted, in the Engliſh language, a ſyſtematic view of the whole, founded upon ſcientific principles, in conformity with the modern diſcoveries in anatomy and phyſiology; and with the modern theories, concerning the nature and cauſes of the different morbid changes which the living frame undergoes."

" In treating of each diſeaſe, he gives a clear and accurate deſcription of its ſymptoms; points out its cauſes, ſtates the degree of danger, and the uſual modes of termination; and ſubjoins a ſimple, rational, and ſcientific plan of cure. What a pleaſing contraſt this forms to the miſerable productions entitled ' Stable Directories,' ' Complete Farriery,' &c., every page of which is crammed with farragoes, called receipts; certainly not inert, but often poſſeſſing a potency of the moſt dangerous ſort."

" It appears to us, that this Work is the beſt and moſt ſcientific ſyſtem of the veterinary art that has hitherto appeared in this country; and we therefore recommend it to all who are deſirous of acquiring a competent knowledge of the ſtructure and diſeaſes of the horſe, and other domeſtic quadrupeds."

Britiſh Critic.

To the above Teſtimonies may be added,---that this Work is at this moment tranſlating into ſeveral other languages, by order of foreign colleges.

THE DOMESTIC TREATMENT OF THE DISEASES OF ANIMALS,

which I have called the domeſtic or imitative mode of learning farriery, is not acquired altogether on theſe grounds, for to ſtudy the art fundamentally, as it re-

quires conſiderable time, with great application and attention, ſo it neither ſuits the leiſure or convenience of the greater part of mankind, who, having either *horſes* or *dogs*, might yet be glad of a nearer road to the knowledge of their diſeaſes and cure. This *domeſtic practice* is therefore fitted for them; and conſiſts in having the diſeaſes, to which the animals treated on are liable, clearly and plainly deſcribed by their diſtinguiſhing characteriſtic marks or ſymptoms, with plain practical rules for the treatment, and ſimple, but efficient, receipts for the cure. Now, theſe deſcriptions, theſe rules, and theſe receipts, can only be formed by a perſon fully aware of the ſubject in its moſt extenſive point of view; and ſuch deſcriptions, rules, and receipts, collected, will then form a *Domeſtic Treatiſe on the Diſeaſes of Horſes and Dogs*, enabling all perſons not within the reach of a regular veterinarian, or in caſes of emergency, or in thoſe inſtances in which they may chuſe to make trial themſelves, to diſtinguiſh eaſily between one diſeaſe and another, and, having ſo diſtinguiſhed, to proceed with eaſe and diſpatch towards the cure, without wading through laborious reaſoning, long caſes, or cramp technical phraſes. In human medicine, a domeſtic treatiſe on the cure of diſeaſe is ſuppoſed to border on empiriciſm, and a man ſo writing is deemed liable to injure the health of mankind, and the particular welfare of the regular prac-

tioner; but though this may in ſome meaſure apply to human medicine, becauſe in moſt places, however ſmall, there is commonly ſome ſurgeon or apothecary near, from whom the ſick may find ready relief, yet in veterinary medicine it cannot apply; for even large towns, many of them, have no regular veterinarian, while ſmaller towns, villages, and the country at large, are all of them deprived of any other aſſiſtance than what can be gained from the neighbouring ſmith; or, at leaſt, they can very ſeldom produce any perſon at all fit to be truſted: therefore any plan that renders perſons in general able to treat the diſeaſes of their animals ſucceſsfully, without riſk or trouble, muſt be a valuable one. This I have endeavoured to lay down in the following ſheets.

But even when this is gained, that is, when perſons are enabled readily to diſtinguiſh one diſeaſe from another, and when the treatment of the ſeveral diſeaſes is underſtood, even then, in moſt caſes, the remedies are often not within their reach; for, frequently, no chemiſt, druggiſt, or apothecary, is near, to compound the preſcribed remedies; or, even when preſent, theſe medicines, on account of their expenſe, may be adulterated, or made deficient; or one drug, as is frequently the caſe, may be ſubſtituted for another: and as to entruſting a regular recipe with farriers of the common claſs, they, in the firſt place,

ſeldom have an aſſortment of drugs or compounds; and if they have, it is leſs ſeldom that they have candour enough to make up any receipts but their own. I ſpeak not here of eminent farriers, or of many of thoſe more regularly educated, even though not dubbed veterinarians, for many of theſe I have met with, who are very ſenſible and candid.

It would add, therefore, very conſiderably to the advantages derived from this *Domeſtic Treatiſe, if the remedies preſcribed were faithfully prepared, at a moderate price, and accompanied the Work itſelf, being generally diſtributed in the hands of every reſpectable vender of medicines throughout the kingdom, ſo as to be within the reach of every one.*--- There have been many perſons who have made and vended remedies, as they termed them, for ſeveral diſeaſes of the horſe. I do not wiſh to depreciate the merits of any one; but thus much I muſt be allowed to ſay, that no perſon can pretend judiciouſly to compound horſe or other medicines who is not acquainted with chemiſtry; and what knowledge ſome of the inventors of theſe medicines have of this ſubject, let their writings ſhew. Without a knowledge of chemiſtry, drugs may be mixed ſo as to produce a third ſubſtance wholly different from their ſeparate qualities, and which, in fact, may prove poiſonous. This is by no means unfrequent; and yet many of theſe compounders jumble, without any judgment,

a vaſt variety of articles into one mixture. With regard to the compounded medicines which I here offer, I can ſay of them, that they have been chemically conſidered in every point of view; and the recipes from which they are formed are the reſult of long experience and frequent experiment; moſt accurately compounded, ſo as to be always of one determinate ſtrength. They are made from the very beſt drugs, without any eye to the expenſe: and, that I may always be enabled to compound them in the ſame way, I have affixed a price that will allow of the purchaſe of the beſt drugs; yet as theſe medicines are prepared in large quantities at a time, ſo the price ſet on each is ſuch, that no individual recipe could be made up for the ſame price, of good drugs, and in juſt proportions. They are likewiſe ſo compounded as to preſerve good almoſt any length of time, and under every variety of temperature; and which is a circumſtance too ſeldom conſidered in the making up of medicines. The form I have alſo endeavoured to make as convenient as poſſible: they are likewiſe very portable.

Hitherto I have ſpoken only of theſe medicines as accompanying this little *Domeſtic Treatiſe on Farriery*, whereby thoſe who read the deſcription of a diſeaſe may advert to a ready prepared remedy for it. But when theſe medicines become known, they may be purchaſed by many who have not ſeen this Work

now if, therefore, theſe medicines contain directions merely for their exhibition, however copious; ſo they will do, in point of inſtruction, only what has been done by others: but I profeſs ſomething more; for, in addition to the excellence of the recipes from which they are formed---in addition to the exactneſs, goodneſs, and convenience of their compoſition---encloſed with each medicine is a regular treatiſe on the complaint, or complaints if more than one, it is intended for. This little treatiſe on the complaint will thus make the poſſeſſors acquainted with the diſeaſe throughout all its ſtages, and in all its varieties; and will alſo have this good effect,---that it will not only teach the whole treatment of the complaint, but it will direct what other remedies may be made uſe of in caſe the one purchaſed ſhould fail, or if any extraordinary circumſtance ſhould render its exhibition improper. In this reſpect, I preſume that I ſtand novel; and in this I conceive my medicine arrangement holds out very ſuperior utility; and in this I hope to prove, that it is completely removed from an empirical attempt to dupe the public: not that I pretend to any ſuperior diſintereſtedneſs; on the contrary, I have ſerved the public ſome years, and I conceive that I merit my reward.

Yet, notwithſtanding this, I make no doubt of being taxed with empiriciſm by many, who are either

too dull to be generally uſeful, or too envious to witneſs any other ſucceſs than their own without repining: but to this tax I do not plead guilty; for, in the firſt place, I will never make up medicines for general diſtribution, but for ſuch complaints as appear in almoſt every inſtance under the ſame form, and require in nearly all caſes the ſame remedies. In the next place, I pretend to few ſecrets: ſome of my recipes, I do believe, have never before been compounded, and ſome of the drugs of which theſe recipes are formed are not in general uſe; but in general caſes, I pretend to no noſtrums; I only uſe the beſt drugs, which I more judiciouſly compound, and with which I offer the ſuperior advantage of more general inſtruction. To prove, likewiſe, that this arrangement is not founded on empiriciſm, I need only cite the regular treatiſe that accompanies each of theſe medicines, which treatiſe holds up to view in as conſpicuous a light, every other remedy proper for the complaint it treats on, as that, or thoſe I offer ready prepared. This treatiſe, likewiſe, affects no myſtery in the compound, nor attributes to the medicine it accompanies any occult qualities, but ſimply conſiders this in common with other remedies. And, laſtly, I will add, that whenever farriery is as well underſtood as human ſurgery, and its practitioners become as enlightened, and as univer-

ſally diſtributed throughout the kingdom, then this ready prepared medicine plan ſhall ceaſe.

I therefore conſider that my preſent plan comprehends a complete ſimplification of farriery, and that it opens an eaſy and ready road to the cure of the diſeaſes of domeſtic quadrupeds, particularly of the *horſe* and *dog*. It does this, by enabling the owners of theſe animals readily to diſtinguiſh one complaint from another, and as readily to embrace the moſt ſimple and efficacious mode of cure. As ſuch, this *Domeſtic Treatiſe*, and *the medicines it recommends*, form, properly, one common whole, and I would adviſe them always to accompany each other; that is, I would recommend the purchaſers of theſe ready prepared remedies to furniſh themſelves with this treatiſe. But that purchaſers of ſingle articles may have every poſſible advantage, and that the arrangement may include every attainable degree of utility, each ſeparate remedy, though a part of the whole, ſtands diſtinct; for it contains a complete treatiſe on the diſeaſe it is intended to remove, and therefore is of itſelf ſufficient for that caſe.

Theſe ready prepared medicines, according to the following arranged liſt, are placed in the hands of all the reſpectable venders of medicines throughout the united kingdom. The whole are prepared immediately by myſelf, and ſigned with my name; and none but theſe can be genuine.

AN

ARRANGEMENT

OF

READY PREPARED MEDICINES

FOR THE

Prevalent Diſeaſes of Horſes and Dogs.

prepared and ſigned by

D. BLAINE,

And ſold, Wholeſale, by T. Booſey, No. 4, Old Broad Street; and Barclay and Son, Fleet Market: Retail, by all the Venders of Genuine Medicines throughout the United Kingdom.

☞ Each Article encloſes a regular practical Treatiſe on the Complaint the Medicine is intended to remove.

HORSES.

CHOLIC BALLS, 2s. 6d. each.

By Cholic is here meant what is generally known by the name of Gripes, or Fret; and not Red Cholic, which is a more dangerous, but leſs frequent, complaint. For the Gripes, theſe Balls are very efficacious; and one alone, if given according to the copious directions accompanying it, ſeldom fails of giving inſtant and permanent relief. Perſons keeping

horſes would find it their intereſt to have ſome of theſe Balls always by them, as the diſeaſe is ſudden in its attack, and generally ſtrengthens by neglect.

CORDIAL BALLS, 1s. each, or 5s. 3d. the half dozen.

Perſons in the habit of giving what are termed Cordial Balls on every occaſion, are often guilty of error; for it is not every one of theſe caſes that requires cordials, and, even when they are proper, the ſubſtances uſually given are, in fact, no cordials at all: a little aniſeed, a few juniper berries, or turmeric, &c., can produce no laſting effect on the conſtitution, except depraving the appetite; but when the circulation droops from exceſſive exertion, as, in racing, hunting, &c, and hence becomes incapable of performing its proper functions, as, eating, digeſting, ſleeping, &c., then, a medicine that at once allays the irritability of the conſtitution, and gives it ſtrength, will be of eſſential ſervice.—This is obtained by theſe Balls, which, therefore, are of great uſe after ſevere exerciſe, as, a long day's hunt, a hard conteſted race, a long journey, or when a cold may be ſuſpected to have been caught. Theſe Balls are particularly uſeful for tender flue horſes, who on any unuſual work refuſe their food: they are likewiſe well adapted to prevent theſe tender horſes from getting out of condition, which they are

very apt to do on any fatigue, change of diet, or when moulting, in ſpring and fall. Theſe and other caſes wherein they may be adviſable are ſpecified at length in the directions enclofed with them.

FEVER CORDIAL BALLS, 1s. 6d. each, or 8s. the half dozen.

At the end of fevers, or towards the cloſe of long and ſevere colds, or other lingering complaints, horſes are frequently very low and faint: in theſe caſes, the active inflammatory ſymptoms having ceaſed, theſe Balls will give ſtrength to the conſtitution to throw off the remains of the diſorder, and perfect a recovery. But in the beginning of fevers and other inflammatory affections, the *Fever Powders* hereafter mentioned are preferable.

COUGH BALLS, 5s. the half dozen.

The coughs which horſes are ſubject to from being out of condition, from long continued colds, or that accompany thick wind, will always be relieved, and frequently cured, by theſe Balls; and in every inſtance of cough unaccompanied with fever, I would ſtrongly recommend them.

STRONG DIURETIC BALLS, 1s. 2d. each, or 6s. 3d. the half dozen.

Diuretics are uſeful in removing ſwelled legs, in reſolving inflammation, and promoting condition. Whenever, in either of theſe caſes, an active, but

ſafe, diuretic is required, I would recommend theſe. They are compounded of none of thoſe rough ſubſtances that ſo frequently prove fatal, but in every caſe will act with ſafety, though actively; but when it is inconvenient to give balls, or a more ſlow and mild plan is thought prudent, then the *Mild Diuretic Powders* hereafter mentioned may be made uſe of.

FARCY BALLS, 6s. the half dozen.

A regular courſe of theſe Balls, according to the directions contained in the treatiſe accompanying them, in moſt caſes effects a cure of this loathſome complaint, when it is within the reach of medicine.

STRONG PURGING BALLS, 2s. each, or 10s. 6d. the half dozen.

When briſk purging is deemed proper, as in ſwelled legs, general foulneſs, too great fatneſs, thick wind, or purſiveneſs, theſe Balls will be found active: but, from the excellence of the aloes entering their compoſition, they will always prove ſafe, never raking the bowels, or producing thoſe fatal gripes often the conſequence of coarſe, draſtic, and badly compounded phyſic.

MILD PURGING BALLS, 1s. 6d. each, or 8s. the half dozen.

In leſſer horſes, or in thoſe more weak and delicate, or in any caſe where the operation of purging

is required only to be very gentle, theſe Balls will be found adequate to the purpoſe.

STRONG MERCURIAL PURGING BALLS, 2s. 6d. each, or 13s. the half dozen.

There are caſes where the common forms of phyſic are not thought ſufficient, but ſomething that ſtill more excites the abſorbing veſſels of the body is required: in this caſe mercurial phyſic is given, of which the above Balls are of the very beſt kind.

MILD MERCURIAL PURGING BALLS, 2s. each, or 10s. 6d. the half dozen.

Theſe are a milder form of the above, intended for ſmall or more delicate horſes.

BLISTERING OINTMENT, 3s. per Pot.

Bliſtering Ointment may be, and very commonly is, cheaply prepared of euphorbium, corroſive ſublimate, or other cauſtic ſubſtances; but, independent of the pain they give, and thereby reduce the condition of the horſe, they very often act ſo deep as to occaſion a laſting blemiſh, and ſometimes even more ſerious miſchief. The above Ointment is principally compoſed of Spaniſh flies, with a mild preparation of mercury added, to make it more certainly ſtimulate the abſorbents; and is a very excellent Bliſter

for ſtrains, ſwellings, wind galls, curbs, ſpavins, ſplents, &c.

LIQUID SWEATING BLISTER, 2s. 6d. per Bottle.

This is a warm, ſtimulating application, that takes ſome time to produce its effect, and even in the end ſeldom raiſes a very active bliſter; it is, therefore, very proper to ſweat away (as it is called) old chronic ſwellings of the back ſinews, or to bathe and embrocate old ſtrains; and, in fact, to apply to any part where it might be inconvenient to put a regular bliſter on. This Liquid is likewiſe particularly fitted for injecting into old fiſtulous ſores.

MILD WASH for GREASE, 3s. 6d. per Bottle.

This moſt efficacious application will be found of the greateſt benefit in the early ſtages of greaſe, and in moiſt cracks of the heels. It is likewiſe often of great ſervice in running thruſhes, when not very virulent.

STRONG PASTE for GREASE, 4s. per Pot.

This Paſte can be recommended for its almoſt unlimited efficacy in the worſt ſtages of greaſe, when milder applications have failed. In pole evil, likewiſe, or other obſtinate fiſtulous ſores, this Paſte, melted and poured into them, ſeldom fails of promoting a healing ſtate. In canker, if ſpread over the

ſore, it prevents its cauliflowers ſprouting, and heals it. In running thruſh of the moſt virulent kind, when poured hot into the cleft in the frog, it hardly ever fails of curing. In quittor, if it is mixed with flour, and put into the pipes of the wound, it has likewiſe the ſame effect, coring out the ſore, and afterwards healing it.

EMBROCATION for STRAINS and LAMENESSES, 3s. per Bottle.

This will be found a valuable application for all ſtrains, whether old or new: it is likewiſe proper for ſhoulder-wrung ſores, ſaddle galls, &c. &c.

MANGE OINTMENT, 7s. per Pot.

This Ointment, intended for the cure of Mange in horſes, I never yet ſaw fail of producing the deſired effect, if applied according to the directions enclosed. It is equally efficacious in deſtroying vermin on cattle, and has often relieved wide-ſpreading farcy.

EYE WATER, 2s. 6d. per Bottle.

The diſeaſes of horſes' eyes are very difficult to remove, and even when removed are very liable to return, and end in blindneſs; ſo that no application can boaſt of much certainty. But the above is poſſeſſed of as much, and perhaps ſomething more, than moſt others; and I have uſed it with great advantage.

ALTERATIVE CONDITION POWDERS, 5s. the half dozen.

Horſes are frequently hide-bound, as well as out of condition: this may ariſe from muſty hay or oats, from moulting, or from worms; in all which caſes theſe Powders mixed with the food will render it more nutritive, looſen the hide, lay the hair, and in every reſpect promote condition. They are likewiſe very proper before and after a courſe of phyſic.

FEVER POWDERS, 5s. the half dozen.

In active fevers, when the heat is very great; in bad colds, and in all inflammatory affections, theſe Powders are proper, and will be found highly uſeful.

WORM POWDERS, 5s. the half dozen.

It is a moſt difficult thing to deſtroy worms within the ſtomach and bowels, and, in many inſtances, every medicine fails; but, in many others, theſe Powders, which I always uſe in my own practice, produce the happieſt effects, and this ſo frequently, that I would always recommend their trial.

MILD DIURETIC POWDERS, 5s. the half dozen.

When an active diuretic is wanted, I would recommend the Ball; but when it is inconvenient to give a ball, or to ſpare the horſe for a regular courſe

of diuretics, theſe Powders are convenient, as they may be mixed with the corn, and will be eaten readily by the animal, who need not be confined by their operation.

DOGS.

The diſeaſes of theſe animals are underſtood, by the generality of perſons, even leſs than thoſe of horſes, oxen, and ſheep; and, I believe, I am the firſt perſon in this country, and perhaps in any other, who has paid any direct and decided attention to them, on ſcientific principles. Though much remains to be done, yet the following Medicines I have found very uſeful in the caſes they are directed for; and, having ſtood the teſt of experience in my private practice, I now offer them with confidence to the public; at the ſame time remarking, that, as with the horſe medicines, none can be genuine but what are ſigned by myſelf.

MEDICINAL POWDER for DISTEMPER, 1s. 6d. each.

The increaſing demand for theſe Powders is a ſufficient proof, I flatter myſelf, of their efficacy.

SPECIFIC OINTMENT for the MANGE, 2s. 6d per Box.

This Ointment was before ſold in leſſer boxes, at 2s. each; but in large dogs this quantity being ſometimes complained of as not ſufficient to apply all over the body, I have increaſed it, by which I am under the neceſſity, when the preſent ſtock is out, of adding 6d. to the former price: but not only is the quantity increaſed, but, from my very great practice on this complaint, and the vaſt number of caſes I ſee every year, I am enabled, at once, conſiderably to increaſe its efficacy, and yet to add to its mildneſs, by which there is not the ſlighteſt caution neceſſary in its application; for, ſhould a dog lick off the whole quantity, not the leaſt ill effect would ariſe.

MANGE POWDERS, 2s. a Set.

Though the Ointment is always found equal to the cure of every kind of mange, yet frequently a dog is ſo wholly out of condition, and his blood is ſo completely tainted, that it much expedites the cure, if ſome internal remedy is given. When there is a heat and redneſs of the ſkin, very troubleſome to the dog, but not amounting to mange, theſe Powders will cure alone: and when a dog has had the mange, and there is reaſon to fear a return (which in mange often happens), theſe Powders, given now and then,

will be a preventive. In ſpring and fall, when dogs are uſually very foul, they are particularly uſeful.--- Theſe Powders have likewiſe a remarkable property of promoting the condition, and, when a dog is thin, of aſſiſting his fattening: on the contrary in fat groſs dogs, by keeping the body gently open, they prevent the increaſe of fat. In fact, too much cannot be ſaid in praiſe of them. A Set conſiſts of ſeveral Powders, with ample directions.

WASH for CANKER in the EARS, 2s. 6d. Bottle.

There is hardly a more common complaint than the canker in the ear. I do not here mean the ulcer that is ſometimes on the outſide of the ear, but that iſſue of either blood or matter from its inſide. This complaint I am very conſtantly conſulted about; and I can with truth aſſert, that the above application has never in any one inſtance failed of curing.

WORM MEDICINES, 2s. 6d. per Set.

Worms in dogs, as in horſes, are peculiarly hard to deſtroy, and are much more fatal to dogs than horſes. The ſymptoms of worms in dogs, are, looſe ſlimy ſtools, and often frothy; a hard belly; a voracious appetite, though frequently a lean carcaſs; the hair ſtares; and ſometimes the noſe runs. It is likewiſe not unfrequent that the convulſive fits,

which dogs are ſubject to, are brought on by worms. The above Medicines I have given in theſe caſes with the greateſt ſucceſs; and whenever there is reaſon to ſuſpect worms, I would recommend them.

PURGING BALLS, 2s. 6d. a Set.

To get dogs into condition for hunting, to cool them, or when they are coſtive, phyſic is often given. For any of theſe purpoſes the above is very proper; and this is ſo made up, of different ſtrengths, that the various ages, ſizes, and ſtrengths of dogs, may be exactly ſuited with the proper proportions. Phyſic in dogs is always obſerved to do them moſt good when it vomits as well as purges, for in them vomiting is a natural act, intended to cleanſe them, and they are always better after it: theſe Balls are compounded in ſuch a manner as to produce both purging and vomiting; and, as ſuch, I have always found them infinitely preferable to any of the other forms of phyſic made uſe of by ſportſmen.

AN OUTLINE *of* THE GENERAL FORMATION, STRUCTURE, AND *Economy of the Horſe.*

THE body of a quadruped is moſt curiouſly made up of a great number of parts, as bones, muſcles, membranes, veſſels, nerves, viſcera, &c. A general outline of theſe parts, particularly of thoſe more internally ſituated, I have endeavoured to convey in the plate forming the frontiſpiece, which repreſents a headleſs horſe on his back, with the belly cut open, and his inteſtines removed; the letters referring to the following parts: *a*, the windpipe. *b*, the gullet, or food paſſage. *c*, the great vein, called the anterior cava, from the right ſide of the heart, dividing into four branches, two of which furniſh the fore legs, and two of them form the jugulars, or neck veins. Immediately by the letter *c* is ſeen the thoracic duct entering the cava: the thoracic duct is the canal that conveys the chyle, or nutriment, ſucked by the lacteals from the food in the inteſtines, and is ſeen paſſing up between the two great blood

veſſels. *d*, the heart: immediately above is ſeen the pulmonary artery, dividing into right and left: on each ſide of the letter are the cavities called the right and left ventricles, and above are the thin cavities of the heart, called its ears, or auricles. *e*, the aorta, or great artery, coming out from the left ventricle; below the heart, is ſeen the great artery and vein, to the left and right, called the poſterior aorta, and poſterior cava. *fff*. the lobes of the lungs. *gg*, the lobes of the liver. *h*, the gall duct, which is here only a ſingle pipe, without any bag or reſervoir, as in other animals. *i*, the ſtomach. *k*, the duodenum, or firſt gut, with the gall duct entering it at the ſame place with the pancreatic duct. *l*, the meſentery, or cawl, ſeen hanging from the ſtomach. *m*, the ſpleen. *nn*, the kidneys. *o*, the great vein, called the vena cava: at its ſide is ſeen the aorta, or great artery. *pp*, the ureters, or pipes, conducting the urine from the kidneys into the bladder. *q*, the rectum, or laſt gut, lying in a natural ſtate above the bladder. *rr*, the ſpermatic cords, or pipes, conveying the ſeed from the teſticles towards the back of the bladder, to penetrate the yard: one teſticle is ſeen drawn out of the bag, that the paſſage of the ſpermatic cord may be ſeen. *ſ*, the bladder.

Bones form the foundation of the machine, ſupporting the ſoft parts, and enabling them to be moved without injury. The progreſſion of a quadruped

principally depends on the form and direction of the bones: thus the ſkeleton will always be found admirably adapted to the various purpoſes for which the animal it belongs to is intended. Bones are formed during the growth of an animal, by means of the blood veſſels depoſiting an earthy ſubſtance within proper membranes formed to receive it. The bones are tipped with a ſubſtance called *cartilage*, or *griſtle*, which, by its great elaſticity, counteracts the jar and ſhocks of violent motion; and, to prevent the effects of friction, the oppoſed ends of bones, forming joints, are furniſhed with a very ſlippery fluid called *ſynovia*, or *joint oil*, which is formed from the blood veſſels of the inſide of the capſular membranes. Theſe membranes being very full of blood veſſels to form this fluid, are conſequently very tender and ſuſceptible of diſeaſe; and this is the reaſon why, when the joint oil eſcapes from a wound, that wound is peculiarly dangerous; for the joint oil eſcaping, the bones rub againſt each other, and thus inflame the joint: therefore, in theſe caſes, to ſtop this eſcape, and prevent the inflammation, judicious farriers apply ſomething to the outer edge of the wound, as a hot iron, which inflames it, and thus cloſes the opening.

The bones, thus connected, form what is termed a *ſkeleton*, which is, therefore, nothing more than an admirable mechanical arrangement of bones. The

ſkeleton of moſt quadrupeds preſents a quadrilateral figure, having an inclined cylinder, ſupported by four pillars, or legs; the projection of the head and neck being counterpoiſed by the additional weight of the hinder parts. The ſtrength of a cylinder is leſs, in proportion to its length, therefore a long-backed horſe is weaker than a ſhort one; and hence ſmall animals can bear more weight, proportionally, than larger:---a dog can carry his own weight, which a horſe cannot do. The bones forming the limbs are, wiſely, not placed exactly perpendicular to each other, but in angles, by which means motion can be performed to a greater extent, and the jarring and ſhocks of ſuch hard bodies prevented, as well as their fracturing: but this deviation from the perpendicular muſt have powers to correct it, and which is effected by the muſcles.

A *muſcle* is a red fibrous part, called fleſh, poſſeſſing a peculiar contractile power, generally under the influence of the will. To the end of a muſcle an inelaſtic cord is generally attached, called *tendon*, or *ſinew*. The ſinews were by the antients called nerves; and hence a ſtrong ſinewed horſe was ſaid to be nervous; a bold expreſſion even was nervous; and the old books of farriery deſcribe the back ſinews as the great nerves of the leg.

Not only is the general inclination of the machine corrected by the muſcles, but they alſo enable it to

tranſport itſelf from place to place; therefore muſcles are the immediate organs of motion. The extent of the action of parts is the produce of their length, direction, and the different angles they are capable of forming: the force ariſes from the direction aided by the muſcles; and though there are many circumſtances, as vigour, irritability, or ſpirit, that operate to the advantage or diſadvantage of the locomotive power, yet an animal ſkeleton is ſo admirably arranged, and formed on ſuch juſt geometrical principles, that, on viewing the bony aſſemblage alone, we may in no ſmall degree form a juſt opinion of the powers of motion poſſeſſed by any animal. It is this that has given riſe to the geometrical admeaſurement of the ſkeletons of horſes, and the treatiſes on the mechanical arrangement of the bones. The curious will find this ſubject more fully treated on in the "Veterinary Outlines," page 342 to 347. The pillars, or legs, of the machine in quadrupeds move forward in progreſſion, and gain a new centre of gravity, the different degrees of celerity of which are called *paces*. The natural paces of the horſe are, the walk, trot, and gallop; all others are artificial, either the effect of education, or debility. A dog has theſe three paces likewiſe; but the larger kinds, many of them, amble:---this is particularly obſervable in ſhepherds' and drovers' dogs.

All the parts of an animal body are formed from what it receives from without, called the *food*. Dif-

ferent animals receive different ſubſtances as food; as, the horſe, grain; the dog, fleſh; and this gives ſome variety to the organs of each. The food is gathered by the front *teeth;* it is then maſticated, or chewed, by the *grinders*, which are wiſely placed far back in the mouth, where, as being near the centre of motion, they have more power; and, as all grinding is aſſiſted by moiſture, *ſaliva*, or *ſpittle*, is poured forth into the mouth. The food being rendered ſmall and moiſt, paſſes into a bag called the *ſtomach*, where it becomes ſtill farther diſſolved and acted on; which proceſs is called *digeſtion*.

Some animals carry on their digeſtion in more *ſtomachs* than one. Oxen and ſheep live wholly on herbage, which, affording leſs nouriſhment than grain, or fleſh, they have need of more extenſive organs to digeſt what they eat very completely. An ox firſt collects a quantity of graſs, which, as he ſwallows, paſſes into a membranous bag called the paunch: when this is filled, he lays down, and then has a power of bringing the pulpy maſs up again to rechew it, and mix it with more ſaliva; when it is directed into a ſecond ſtomach, without again entering the firſt, or paunch; from whence it paſſes on to a third, and a fourth. The horſe, the aſs, the hog, and the dog, have one ſtomach only; but in the horſe this organ is of a different kind in ſome reſpects to that of moſt other quadrupeds, except aſſes, rats, and

mice, which animals, like the horſe, appear alſo deſtined to live on grain. This peculiarity conſiſts in having its firſt half covered by a thick, ſtrong ſkin, which defends it from the hard bodies of grain, and perhaps acts, in a ſlight degree, as a gizzard on theſe bodies. A horſe has a very ſmall ſtomach [ſee *i*, frontiſpiece]; he therefore eats little, but often; for being a ſpeedy animal, it would have been inconvenient that he ſhould eat much, and have retained it long in his ſtomach. Not only, therefore, is a horſe's ſtomach ſmall, but what he eats ſtays there but a little time. Thus a horſe will drink three pails of water, yet his ſtomach will hold only one: hence, as a horſe's food ſtays but a little time in his ſtomach, it is neceſſary that it ſhould be broke very ſmall before it enters; and this teaches the uſe of giving horſes bruiſed food, which partly chews it for them, and thus makes it prove more nutritious: it likewiſe ſhews us why a horſe bears hunger ſo much worſe than cattle, for his ſtomach holds but little, and paſſes that little off ſoon. From this it will appear that the mode of treating hunters and racers is erroneous, when they are deprived of victuals many hours before they hunt or race; and hence, at the end of their exertions, they are frequently weakened too much to recover. The ſtomach of a dog is more muſcular and ſtrong than that of a horſe, for he has to act on ſtrong ſubſtances, as fleſh, which, when

properly acted on, afford so much nutriment, that he can fast twenty-four hours after a meal without prejudice; and hence dogs who are fed with flesh once a day fatten; but, if they have vegetable food, as biscuit, &c., they should be fed moderately, but more often.

A horse cannot vomit; the principal hindrance to which arises from a very strong sphincter, or bundle of fibres, around the mouth of the stomach. If a horse could vomit, he must be choaked; as, from a peculiarity in his mouth, the returned substance would probably pass into his nose.

The *intestines* are a long track of membranous canal, vulgarly called guts, that reach from the stomach, and wind round the belly many times, and end in the fundament: they are divided into small and large, but both are a continuation of the same track. In animals who live on flesh, as dogs, the difference between the small and large is trifling; but the large intestines in a horse contain a vast quantity. The food here becomes mixed with the bile and other juices [see *k*, frontispiece], where the gall duct is seen entering the first small intestine, just as it arises from the stomach: the juice of the pancreas, or sweetbread, is likewise seen entering at the same place. Throughout this long track of intestines the food mixed with these juices passes; and, as it stays a less time in the stomach of the horse, so it

muſt ſtay a longer time in the inteſtines to perform its changes: and this is actually the caſe. This becomes neceſſary to keep in mind, as it ought to influence our conduct in travelling, and induce us to give a horſe ſuch food as may prove moſt nutritious on a ſhort ſtay: it ſhould diſpoſe us, likewiſe, to give a horſe time to digeſt his food when he has received it, and not hurry it immediately as it is received, through the inteſtines by the preſſure of the muſcles, ſo that little nouriſhment can be derived from it. This alſo explains to us why phyſic in a horſe takes twenty-four hours to operate, when in us it will work in half an hour: the inteſtines are here a very great length; nor is the horizontal poſition of the animal favourable to the paſſage of their contents. The inteſtines are furniſhed throughout their length with little veſſels ariſing from them, which are called *lacteal abſorbents;* and the reſt of the body is furniſhed with ſimilar ones, which are called *lymphatic abſorbents.* Thoſe of the inteſtines ſeparate the nutritious parts, and carry them into a canal termed the *thoracic duct.* The lymphatic abſorbents collect fluids, and even ſolids, from all parts of the body, and carry them likewiſe to this ſame duct, which may be ſeen in the plate running up the back bone between the two great blood veſſels; and paſſing behind the heart it enters the anterior vena cava where it receives the great vein of the arm

and of the head [vide *c*, frontiſpiece]. It is from this ſource that the *blood* is formed; and it is thus that food goes to the ſupport of the conſtitution by forming of blood.

The *blood*, which is univerſally and continually circulating through the machine, conſiſts of a ſolid part ſuſpended in a fluid, which, on being cold, ſeparate from each other. To circulate this fluid, reſervoirs and canals are neceſſary: the reſervoirs are the cavities of the *heart*, and the canals are called *arteries* and *veins*. The arteries carry it from the heart [ſee the plate, where *o* repreſents the vein, and that without a letter, next to it, the artery]. Thoſe carrying the blood to the heart are the veins. There is what is called a double *circulation*; that is, while part of the blood is paſſing over the reſt of the body, part is paſſing through the lungs, but ſo that, alternately, all paſſes through the lungs, and all through the other parts of the body. As the blood paſſes through the lungs, it is acted on by the air, becomes pure, and receives heat; and, as it paſſes over the reſt of the body, it gives out the purity and heat which it received from the air, and the nouriſhment which it received from the chyle, thus to form, increaſe, and nouriſh the various parts of the body, and to ſupport the ſecretions of the different fluids. The force with which the heart acts is ſo contrived, that at one moment it re-

ceives the blood of the veins, and at another it ſends it out again, from an alternate contraction and relaxation: the arteries correſpond in this; and this forms what is called the pulſe. The *pulſe* in the horſe beats about forty or forty-five times in a minute: in a dog it beats eighty, ninety, or one hundred; for a ſmall animal has more irritability, and is weaker, than a large one; and hence what the heart wants in ſtrength it makes up in quickneſs: for which reaſon, young animals, as being weaker, have always a quick pulſe; and thus a quick pulſe without fulneſs is a mark of weakneſs. When the heart is ſtimulated to act by ſome particular cauſe with great force, the pulſe is then full: if this ariſes from ſome diſeaſed cauſe, the animal is then ſaid to have fever.

The blood is the life of the machine, for it nouriſhes and forms every part; and this it does either by depoſiting its parts at once by its veſſels, or through the medium of glands: but in whatever way it is done, it is called ſecretion. A *gland* is a large maſs formed of an aſſemblage of arteries, veins, and excretory veſſels, ſeparating the ſecreted fluid, and carrying it off. The *liver* [vide *ggg*, frontiſpiece] is a gland to ſecrete the bile; and it is remarkable of this gland in the horſe, that the bile is not kept in a reſervoir called the gall bladder, as in other animals, but paſſes at once into the inteſtines as it is formed. The bile is the natural purge of the inteſtines; and, as we have already ſhewn that a horſe is

almoſt always eating, and that the food is neceſſarily paſſing off very quickly, ſo in him it was neceſſary that the bile ſhould conſtantly flow. The liver of moſt animals intended for quick motion is wiſely divided into ſeveral lobes [vide frontiſpiece], and not, like that of man, formed nearly into one great maſs: by this diviſion into parts, the great exertions of the animal in leaping, running, &c., are not injurious to the organ. The *kidneys* are two important glands [vide *nn*, frontiſpiece], deſtined to ſeparate the watery parts from the blood: theſe glands are more certainly acted on in the horſe than in man: hence diuretics, or urine medicines, are given with certainty to horſes, and never fail of their effect.

The *nervous ſyſtem* is a ſpecies of primum mobile---a ſpring whereby all the actions of the body are ſet in motion: this ſyſtem is formed of the *brain*, which is placed in the ſkull; and of white cords called *nerves*, that diſtribute the influence of the brain to all parts of the body.

The *eyes* in a horſe are very acute; and quadrupeds in general ſee better, particularly at night, than man: the pigment of their eye is better fitted to retain the light. Man defends his eyes with his hands; but quadrupeds, not having ſuch means, are kindly afforded others which man is denied. A horſe has a muſcle ſurrounding the optic nerve that can draw the globe of the eye within

the ſocket to a great depth; and farther to defend it, as this is drawn in, a griſtly curtain is thrown before the eye. Farriers call this the *haw;* and ſome of them are ignorant enough, when the eye becomes inflamed, to cut off the prominent parts of it ſeen at the inner corner of the eye.

Hearing in quadrupeds is likewiſe very acute, and their ears are wiſely ſo formed as to receive a great many ſounds, and to be able to direct them towards the objects they wiſh to attend to: hence their ears are very moveable. *Taſting* is effected by the tongue and parts around. *Smelling* in quadrupeds is ſtill more acute; and to this end the cavities of the noſe are very large, to enable them to diſtinguiſh the properties and qualities of every thing around them. *Feeling* is univerſally given to every part; but the more immediate organ of perception in the horſe exiſts in his noſe: in the dog, in his noſe and paws. Quadrupeds are covered with ſtrong ſubſtances called *ſkin*, or *integuments:* theſe do not differ from thoſe of man but in the addition of a large quantity of hair, the various tints of which give the terms of bay, cheſnut, black, white, grey, &c., to the horſe; and yellow, liver, pied, mouſe, white, black, &c., to the dog. An animal thus formed, when arrived at maturity, is endowed with a ſenſation morally termed love, and naturally, luſt; and for the fulfilment of this paſſion he is endowed with

certain organs: in the male, the *teſtes*, or *ſtones*, for the formation of the *ſeminal fluid*, and the *penis*, or *yard*, for the diſcharge of it. In the female, the *ovaria*, which contain the rudiments of the future animal; and the *uterus*, or *womb*, into which it paſſes after impregnation. In this ſituation it is retained till it arrives at ſufficient perfection to perform the various functions neceſſary to ſupport life in the world. This is called the *period of geſtation*, or *going with young*, which differs in different animals according to their ſize; being longer in the large, and ſhorter in the ſmall. In the mare it takes up about eleven months; in dogs, about nine weeks, or from ſixty to ſixty-three days.

AGE OF THE HORSE AND DOG.

Domeſtic quadrupeds have all of them certain alterations that take place in their bodies at fixed periods of their life, by which their age may be aſcertained with conſiderable preciſion. *Oxen* have a temporaneous ſet of horns, which give place, at three years old, to a permanent pair, which produce a circle every ſucceeding year; ſo that by counting three years for the point of either of the horns, and a year for each circle, the age is gained.

Deer acquire an additional branch to the palm of the horn each year.

Sheep and *goats* do not change their horns: one year, therefore, being counted for the point, and an additional year for each circle they prefent around them, furnifh the obferver with their ages.

Dogs have no exact criterion of their age; but their habits of domeftication enable us to judge with confiderable certainty relative to it. At about four years the teeth loofe their points, and gain a furface, which increafes as the age advances; they likewife become lefs white, and more uneven; and frequently by picking of bones one or more are loft. At feven or eight the hair about the eyes becomes flightly grey, which gradually extends over the face; but it is not till ten, eleven, or twelve years, that the eyes lofe their lufire: whenever that takes place, the dog breaks faft, though many dogs laft fifteen, fixteen, or feventeen years, and I have feen a mother and fon, vigorous at twenty and twenty-one years.

The *age of horfes* is alfo gained by a knowledge of the appearances their body puts on at different periods: as they become old, their eyes fink, their muzzles turn white or grey, and their eye-pits become hollow; but thefe appearances depend fo much on the previous ufage of the animal, that the exact age cannot be gained from an attention to any of them: we therefore have recourfe to the teeth, which furnifh certain alterations in their appearance

every year in all horſes nearly alike. Horſes have 40 teeth, and mares 36: 24 of theſe are grinders, or double; 12 are front teeth, or gatherers; and four, that occupy the ſpace between the double and the front, are called tuſhes, but of which mares are uſually deprived. Horſes have two ſets of teeth; a temporaneous or milk ſet, and a ſet called permanent, or horſe teeth. Till five years the age is judged of by the ſhedding of the twelve fronth teeth of the milk ſet. At two years and a half, the two front nippers above and below fall out, and are changed. At three and a half, the two teeth next to theſe, above and below, are replaced by others; and before five the two corners alſo; about which period the tuſhes likewiſe fall, and the colt aſſumes the name of the horſe; and without them, on the appearance of the two corner ones, the filly becomes a mare. Each of theſe permanent ſet of nippers has a mark or cavity in its upper ſurface, and the appearance or abſence of which cavity forms the principal mode of judging of the age. At ſix years the cavities of the two front nippers of the lower jaw are filled up. At ſeven, thoſe of the two next of the ſame jaw fill up; and from this to eight the corner ones fill up likewiſe, when the horſe is ſaid to have loſt his mark, and to be aged. The upper teeth may, however, after this period, furniſh ſome criterion to judge by, though perhaps not altogether with equal preciſion; for at the ſame time

that the cavities of all the lower nippers are obliterated, thoſe only of the two front upper ones are effaced: ſo that at eight years the two front upper nippers loſe their mark; at ten, thoſe of the two next; and at twelve, thoſe of the two corners. It muſt, however, be remarked, that horſes for their real uſe are to be judged according to their conſtitution, and the previous uſe that has been made of them; ſome being capable of every uſeful exertion at fifteen, or even twenty, while others are worn out at nine or ten.

Various are the tricks practiſed by breeders and dealers to make horſes appear either younger or older. In colts, it is not unuſual to beat out the corner milk nippers, by which the permanent ones ſooner appear; and as it is after their appearance only that horſes are ſuppoſed to be fit for work, ſo they enhance their value by this operation. Biſhopping is another of the devices practiſed, and which conſiſts in making an artificial cavity in the ſurface, now worn plain, by means of a ſharp hard tool, and then burning the cavity black with a heated pointed inſtrument: but the ſtrokes of the graver detect the impoſition, and the two inner grooves of the tuſhes cannot be reſtored by ſimilar means; nor can its blunt point be again made ſharp and prominent.

ALTERATIVES.

Alteratives are medicines that act on the body in a ſlow and nearly imperceptible manner, thereby cor-

recting any latent evil. It is an improper cuſtom to give alteratives when an animal is in health, under the idea of increaſing it, or keeping him ſo; for it is evident that, when an animal is in health, any alteration muſt be for the worſe.

The ſubſtances uſed as alteratives are of different kinds, and act in different ways; but they may principally be referred to ſuch as act on the ſkin, called *ſudorifics*, or *ſweats*, as ſulphur, antimony, mercury, warm cloathing, &c.; to ſuch as act on the kidneys, called *diuretics*, as reſin, nitre, cream of tartar, antimony, fox-glove, tobacco, turpentine, &c.; to ſuch as act on the inteſtines, called *purges*, as aloes, gamboge, calomel, ſalts, &c.; to ſuch as act on the ſtomach, increaſing its tone, called *ſtomachics;* to which may be alſo referred *cordials*, as bitters of various kinds, ſpices, malt, beer, &c. Theſe various ſpecies of alteratives are treated of at length under their ſeveral heads. See SUDORIFICS, DIURETICS, PURGES, STOMACHICS, and CORDIALS.

To theſe may be added thoſe alteratives that act by all the above means, that is, ſuch as gently ſtimulate all the ſecretions at the ſame time, as the ſkin, the kidneys, the bowels, &c. Various ſubſtances are uſed for this purpoſe, as nitre, antimony, ſulphur, and maſhes; an entire change of food, as from ſtable-fed to graſs, may either of them prove

an excellent alterative, as they act on all the secretions at the same time.

The cases that require alteratives are surfeits, swelled legs, grease, thick wind, hide-bound, and general relaxation, which is shewn by faintness, dulness, and constant sweating. The best general alterative that I have found in my practice is a compound that may be seen among my ready prepared remedies, called *Alterative Condition Powders*. See page 25.

These Powders act imperceptibly on all the secretions at the same time, and hence are very proper for surfeits, swelled legs, mange, hide-bound, and want of condition; and are very convenient, because they may be mixed with the food, and hence occasion little trouble, and require no confinement or precaution.

BALLS, REMARKS ON.

Balls are a very common form of putting horse medicines into, and they are also the most convenient form to give medicines to dogs: many substances, likewise, will not readily compound into any other form. When persons are expert at it, *delivering* (as it is called) a horse ball is much easier than the giving a liquid or drench. The mode of giving balls to dogs may be seen in the Preliminary Remarks on Dogs, at the end of the book.

A *horſe ball* ſhould be leſs than a pullet's egg, but longer: it ſhould be firm in conſiſtence, and not liable to crumble; nor yet ſhould it be too hard, or it may choke. This is a fault that moſt ready prepared horſe balls have: ſome are ſo hard, that, even if they do get down, all the powers of the ſtomach can hardly diſſolve them, and they may paſs away unacted upon. This defect ariſes from making uſe of an improper ſubſtance to mix them with: it will, however, be found, that the ready prepared balls I recommend never harden by age. There is an inſtrument called a *balling iron*, often uſed by perſons not very expert at delivering balls: it is beſt to give them without it; but, when it is uſed, it ſhould always be guarded with cloth, to prevent the bars of the mouth from being wounded. *The moſt convenient mode of delivering a ball* is, to back the horſe in his ſtall, when the operator, raiſing himſelf on a ſtool (the bottom of the bucket is a very uſual convenience, but it ſometimes falls in, and alarms the horſe), ſhould gently draw the tongue a little out of the mouth, ſo as to prevent its riſing to reſiſt the paſſage of the hand; but the tongue ſhould not be held out alone, or the ſtruggles of the horſe may injure it, but it ſhould be held firmly by the fingers of the left hand againſt the jaw. The ball, being previouſly oiled (the ſilver paper that is round all neatly and properly prepared balls ſhould not be taken off),

muſt now be taken in the fingers of the right hand, lengthways, when the hand, being ſqueezed into as ſmall a ſpace as poſſible, it ſhould be paſſed up the mouth cloſe to the roof, by which injury from the teeth will be avoided: having placed the ball on the root of the tongue, the hand ſhould be withdrawn, and the tongue liberated, but not the head; when the ball will paſs down. The head ſhould, during the whole, be but moderately elevated: when it is held too high, there is frequently danger of choking the horſe. As the operation of giving balls, and even drenches, is a very forcible one, and produces great reſiſtance on the part of the horſe, ſo it is impoſſible to give them (except in caſes of conſiderable emergency) more than twice a day; and yet ſome veterinarians, who write from theory, and not from practice, are found in common caſes directing balls and drinks every three or four hours.

Balls ſhould be prepared with very great care: the dry ingredients ſhould be very finely powdered, and the moiſt moſt intimately mixed. In preparing them, an accurate knowledge of chemiſtry is neceſſary, or one ſubſtance may have ſuch an effect on another as to convert it into a poiſon. When intended to be kept, great care is requiſite to preſerve them from ſpoiling: this is beſt done by compounding them in ſuch a way as neither to harden, moulder, or ferment. The balls entering into my ready pre-

pared medicine arrangement have thefe advantages; they likewife retain their virtue any length of time, are moft intimately mixed, never harden, and are of a proper fize and convenient form. Thofe intended for horfes are, mercurial and common *Purging Balls*, *Diuretic Balls*, *Cordial Balls*, *Cough Balls*, *Farcy Balls*, *Fever Cordial Balls*, *Cholic Balls*: thofe for dogs are, *Purging Balls* only, as the other remedies are purpofely made in the form of powders, to leave it optional with the giver what form he may chufe as the moft convenient.

BLEEDING.

Sweats, diuretics, and purges, are all particular modes of leffening the quantity of blood in the body, for what is removed from the body by them is forced to be fupplied by the blood; but bleeding is a more quick and effective mode of leffening the blood, and has this difference from the former, that it removes all the parts of this fluid at once, and is, therefore, ufed to reduce the conftitution; whereas the others only remove the watery parts, and therefore can be fafely applied in almoft all cafes, when bleeding would weaken too much. In all great and violent inflammations the blood veffels appear diftended with blood; bleeding, therefore, in thefe cafes, by relieving the veffels from their diftention, tends to remove the inflammation. Hence bleeding is the moft effec-

tual means of treating riſing of the lights, or inflammation of the lungs; red cholic, or inflammation of the bowels; red water, or inflammation of the kidneys, &c. Blood may be drawn from any part of the body, but in common caſes it is uſually drawn from the great neck veins that run up, one on each ſide in the hollow, between the windpipe and the fleſh of the neck. Bleeding is not a difficult operation when once learned, and is commonly practiſed by a fleam, which, being held juſt on the vein, is ſtruck with a ſtick ſufficiently forcible to penetrate the vein, but not to paſs through it. The moſt proper part to be opened is about a hand's breadth from the jaw. If a ligature round the neck is uſed to raiſe the vein, it ſhould not be tied too tight; but it may, in moſt inſtances, be avoided by preſſing one of the fingers, of the hand holding the fleam, on the vein, which will then riſe. It is prudent to cover the eye of the ſide the blood is to be drawn from, as the flouriſh of the blood-ſtick may make the horſe ſtart, and thus a wrong part be ſtruck, or the operation fruſtrated. The pin ſhould never be ſuffered to remain more than twenty-four hours, or the wound often feſters.

The quantity of blood drawn muſt be regulated by the age, ſize, and ſtrength of the horſe, together with the nature of the diſeaſe. In violent inflammations of important organs, as the lungs, bowels, &c., too

little is uſually taken away: in theſe caſes, five, ſix, or even ſeven, quarts is not too much. A horſe has loſt forty pounds without fainting, and has recovered. If, in acute or violent diſeaſes, the blood drawn is firm, with a white tough cruſt on it, a repetition of the bleeding in a few hours is warranted. This particularly is the caſe if the ſymptoms yet remain in force, though the animal ſeems but little weakened by the former bleeding; alſo if his pulſe, or the beating of the heart, which was before obſcure, became more evident as the blood flowed. Blood, when drawn, ſhould always be meaſured; that is, never ſuffer it to fall from the horſe into ſtraw, or on the ground, for horſes have bled to death by this means; or too ſmall a quantity has been taken, which has proved equally fatal.

When it is neceſſary to draw blood from the plate vein, or thoſe of the legs, great care is requiſite to avoid piercing through the blood veſſel, and wounding the parts below, which might occaſion very ſerious inflammation. In theſe caſes, inſtead of the common fleam and blood-ſtick, a ſpring fleam is proper:---perſons expert at it uſe a lancet, which is ſtill more ſafe. The neck vein may likewiſe be very properly and eaſily be punctured by this means, and which in timid horſes proves an excellent mode.

Bleeding in health, to prevent diſeaſe, is ſeldom neceſſary; however, to condemn it altogether is as

improper, for there are cafes when it may prevent very fatal difeafes. When it is neceffary to get a horfe, from very low living, into condition very quickly, as from grafs, ftraw yard, &c., if in this cafe high feeding is began upon in its full extent without previous bleeding, it is more than probable that the horfe will be attacked with ftaggers, or fome other difeafe. Whenever, therefore, a horfe alters his mode of living from a lower regimen to a fuller, it fhould either be gradually done, or he fhould be bled once previous to the procefs, and once during it. Bleeding is by fome deemed abfolutely neceffary to the cure of mange; but though this is not the cafe, nevertheleſs, when the difeafe is very inveterate, it is not improper: it is, however, leſs proper when it has been occafioned by too low feeding, or is accompanied by great emaciation; but when the animal is fat with it, it is very proper.

BLINDNESS

Is a very frequent difeafe among horfes, and is generally one of two kinds: that arifing from the weeping inflamed eye, by fome termed *lunatic*, which, after frequent attacks, ends in a white hard mafs, feen within the globe of the eye, forming a cataract. The other fpecies of blindneſs, among farriers, horfe-dealers, &c., is known by the name of *glafs eyes*, from the green fhining appearance thefe

eyes have; but which, to perſons unaccuſtomed to looking at horſes' eyes, is not eaſily obſervable: but it may be detected by the animal not winking when the hand is moved a little from the eye, and by his caution in coming out of the ſtable, lifting his legs high, and moving his ears quickly, as in alarm. The origin of this diſeaſe is ſuppoſed to exiſt in a paralytic affection of the optic nerve. The treatment of both may be ſeen under the article EYES.

BLISTERING

Is an operation of great utility, and is, perhaps, the ſafeſt that is performed. Bliſters act by inflaming the ſkin, which, drawing a large quantity of blood to the part, its watery portion, or ſerum, is ſeparated, and this forms the running. In a day or two the irritation of the bliſter ceaſes, and the part is then in the condition of a common wound, and, as ſuch, produces pus, or matter. At the ſame time, likewiſe, that a bliſter acts on the ſkin, it ſtimulates the ſurrounding abſorbents to take up other fluids; and if the bliſter is ſtrong, and they are much excited, theſe ſame abſorbing veſſels remove even the ſolids likewiſe.

Mercury is known to ſtimulate theſe veſſels more than moſt other ſubſtances; therefore, when we wiſh particularly to ſtir up the abſorbents to remove a part, we make uſe of a mercurial bliſter; that is,

calomel, or corroſive ſublimate, is mixed with the ſpaniſh flies, euphorbium, or whatever the bliſter is compoſed of. Mercurial bliſters are, therefore, uſed for ſplents, curbs, ring-bones, &c.; but when we wiſh only to inflame a part, thereby to draw the inflammation from ſome other part, we content ourſelves with the flies, or other ſimply irritating ſubſtance.

It is a law in the animal economy, that two inflammations ſeldom exiſt in the vicinity of each other; therefore, when an inflammation has taken place in any part, and we wiſh to remove it, we attempt to raiſe an artificial inflammation in the neighbourhood by means of bliſters, which, if we effect, we remove, or at leaſt leſſen, the more natural inflammation. Therefore, in inflammations of the lungs, bowels, &c., it is proper to bliſter the cheſt, belly, &c., very extenſively, by which means the inflammation may be removed from the vital organs to parts of leſs importance.

The ſubſtances uſed as bliſters are various; the more active are, corroſive ſublimate, butter of antimony, oil of vitriol, euphorbium, &c.: the more mild are, preparations of ſpaniſh flies, of horſe-radiſh, muſtard, &c. Great care is neceſſary in the compounding of bliſters to advantage, as well as much judgment: they are frequently ſo ſtrong as to leave a blemiſh through life, and this is particularly

the caſe with euphorbium and corroſive ſublimate. I have ſucceeded in compounding an ointment equally adapted for all the purpoſes of bliſtering, diſtinguiſhed in the medical arrangement under the title---

BLISTERING OINTMENT [ſee page 22]. This will be found efficacious in all bony ſwellings, as curbs, ſplents, bone-ſpavins, ring-bones, &c.; bliſtering the ſkin actively, without deſtroying the roots of the hair and blemiſhing the part, as is frequently the caſe with the bliſters in uſe for theſe complaints. It likewiſe will be found a moſt excellent application when bliſters are required for old ſtrains of any part; claps of the back ſinews, ruptured ligaments, and in every caſe requiring an active but ſafe bliſter.

LIQUID SWEATING BLISTER [page 23]. There are ſome caſes in which a more ſalutary effect is produced by gently ſtimulating an affected part for a conſiderable length of time, without raiſing the ſkin, or producing much running: this is effected by what is termed a ſweating bliſter, which is commonly in the form of a liquid. Great pains have been taken to render the above an excellent warm ſtimulating application. The caſes in which this kind of application is adviſeable are, old ſtrains of parts ſurrounded with much fleſh, as the round bone, the ſtifle; and it is frequently uſeful as a long continued application to paſterns and back ſinews having old enlargements, not being gourdy from that ſimple ſwelling, which

diſappears on exerciſe. This kind of enlargement, called technically ſwelled legs, ſhould be diſtinguiſhed from the hard thickened enlargements of the tendons and ligaments. The Liquid Bliſter is a good application for old ſhoulder ſtrains. There is likewiſe another caſe in which this application may be found particularly uſeful, but in which it is leſs generally uſed by farriers and perſons who profeſs to make liquid bliſters. This Liquid Sweating Bliſter will prove one of the beſt injections for fiſtulous ſores that want ſome ſtimulating fluid injected into them, which may be done by a ſyringe, or poured in by a pipe. When, however, fiſtulous ſores of great inveteracy, as canker, pole evil, &c., want coring out, then ſome of the Strong Greaſe Paſte, melted and poured in, will be a more proper application.

The mode of application of bliſters is ſufficiently known. In bliſtering the legs, it is a cruel and dangerous practice to bliſter all round: in every caſe a generous and unoffending animal ſhould be put to as little pain as poſſible; and two legs at a time are as many as can ſafely be bliſtered. The hair ſhould be cut as cloſe as poſſible from around the part to be bliſtered; the ointment ſhould then be well rubbed in with the hand againſt the hair, which ſhould laſtly be ſmoothed down, and ſome of the ointment then plaſtered on with a knife, or ſpatula. There is a kind of prevention to the horſe's licking or biting the part, by means of what is termed a cradle round

the neck. When this is not at hand, the head ſhould be tied up ſhort to the rack for twenty-four hours. In three or four days from its application, when the part becomes dry and ſcurfy, a little lard rubbed on will aſſiſt the falling off of the ſcab and the reproduction of the hair.

BREAKING DOWN.

The accidental injury horſes ſometimes ſuſtain, called *Breaking Down*, is either total or partial. The total, or complete breaking down, is a perfect rupture of the back ſinews, between the knee and fetlock. In this caſe the fetlock is brought to the ground; and though union may take place between the divided ends, it is ſo incomplete as to render the animal of little or no ſervice.

The partial breaking down, and which is the moſt common, ariſes from a rupture of the ſuſpending ligaments of the paſtern [vide "Veterinary Outlines," vol. ii. plate 8, where theſe ligaments are exhibited, and from whence the nature of the injury may be perfectly underſtood]. It is this accident that ſo frequently happens to young horſes in training. Here likewiſe the paſtern is brought almoſt to the ground, but the line of back ſinews remains complete, and the general derangement of the limb is infinitely leſs than in the former caſe. It is ſeldom, even in this minor injury, that the cure is ſo complete as

to leave the affected limb the full ſtrength and freedom of the other: it may however be attempted by elevating the heels, by a proper ſhoe, three inches above the level of the toe. The inflammation ſhould be abated by bleeding, a mild diet; and to the part itſelf may be applied an emollient poultice, or it may be kept conſtantly moiſtened by a rag wrapped round it wet with the

EMBROCATION for STRAINS [page 24]. When the inflammation has ſubſided, bliſtering will generally aſſiſt in the cure.

BROKEN WIND. See WIND.

CANKER.

When a running thruſh has been neglected, and has made its way through the frog, and attacks the fleſhy ſole of the horſe's foot, it is called a canker: its tendency to ſpread is ſuch that the part appears inoculated with the diſeaſe, and, unleſs its virulence is ſtopped, it very ſoon deſtroys the whole foot.

The cure muſt be begun by cutting away all the luxuriant fungus, or proud fleſh, that appears even with the ſurface, when ſome butter of antimony may be ſpread over it; or it may be touched with oil of vitriol; or, in fact, any cauſtic ſubſtance will be proper; but I have generally found that a compound of ſeveral ſubſtances of a deſiccative nature has proved

more beneficial than any individual ſubſtance; and that form which has never failed me is what I have called

STRONG PASTE for GREASE [page 23]; this being well ſmeared over the whole ſurface of the ſore, a firm but regular preſſure muſt be applied on it by means of layers of tow, over which may be placed a piece of ſtiff leather, kept in its ſituation by means of croſs bars of iron placed under the ſhoe. The dreſſing ſhould be repeated every other or every third day, as the growth of the fungus appears more or leſs luxuriant; but it is a very wrong practice, which ſome farriers fall into, to dreſs theſe caſes once only in four days: where the ſprouting of the fungus is very luxurious, to dreſs every day is much more proper. I have in ſome very inveterate caſes found much benefit from ſprinkling over the fungus, before I applied the Paſte, a powder of equal parts of red precipitate and alum. It is to be remembered in the cure of canker, that though preſſure is one of the great means of cure, this preſſure ought not to be made by the hoof; on the contrary, wherever this binds in on the affected part, it muſt be taken away, or at leaſt thinned ſufficiently.

CATARACT. See EYES.

A COLD.

A cold, as applied to diſeaſe, is what in human medicine is termed catarrh, and in old books of farriery morfoundering; and, when it becomes epidemic, it gains the name of diſtemper in horſes, and influenza in man. It conſiſts of an inflammation of the membranes of the noſe, which ſometimes extends to the gullet, and produces ſore throat. As it attacks with more or leſs violence, the fever is more or leſs, and the diſeaſe becomes formidable or trifling.

A cold is caught from expoſure to cold, particularly to a current of air: thus riding againſt the wind will often produce it both in the horſe and the rider: the ſtable door opening againſt the horſe's flanks is a frequent cauſe alſo; in fact, any unuſual expoſure will produce it. But what is leſs generally known is, that this complaint is frequently taken from the removing from a cold into a warm ſituation: thus a horſe removed from graſs to a ſtable commonly exhibits ſymptoms of a cold. Any alteration of temperature, therefore, whether from heat to cold, or from cold to heat, may produce it:---this is an additional argument againſt the keeping of ſtables ſo hot as they uſually are. There are ſome circumſtances, independent of the known cauſes producing this affection, with which we are not well acquainted: at ſome times horſes will reſiſt the greateſt variations of tem-

perature; at others, the ſlighteſt change affects them. It is peculiar that a horſe, becoming habituated to one ſtable, is hardly ever moved into another, even though of the ſame apparent heat, without having a cough. In many caſes, colds and coughs ſeem dependant on ſome particular effect the air in general has on them; in which caſes they rage univerſally, and put on an epidemic form.

When a horſe has been much expoſed, and is ſuſpected of having caught a cold; if, before its effects have become apparent, warm clothing, a warm maſh of malt, ſome ſound ale, or in fact any thing that proves a cordial to the conſtitution, is made uſe of, the acceſs of cold is prevented; for a ſlight fever is raiſed, by this means, in the conſtitution, that prevents the formation of that which would have ariſen from the cold:---the ſame takes place in ourſelves, which has given riſe to the cuſtom of drinking brandy when we have been expoſed to cold or wet. When, therefore, I have, in my own ſtable practice, feared a cold, I give a cordial ball, a malt maſh, and clothe warmly for the night; and by this means I have ſeldom found a cold or cough come on.

The ſymptoms of catarrh or cold are a dull, heavy aſpect; a cough at firſt harſh and dry, afterwards rattling and moiſt; the appetite is loſt, and frequently the drink is refuſed, and the flanks heave. If the breathing becomes very difficult, the inſide of the

noſe very red, and the legs and ears cold, inflammation of the lungs, or, as the farriers term it, riſing of the lights, may be ſuſpected; and if without theſe the dejection ſhould be conſiderable, with a hot ſlimy mouth, the caſe may prove troubleſome from its degenerating into a regular fever. But when the appetite fails but little, the heat of the body being regular and moderate, and the animal coughing ſtrong, and ſnorting out moiſture or matter from his noſe, no danger is preſent.

All colds are, in the firſt inſtance, to be treated as fevers and inflammations. If the ſymptoms run high, bleed; open the body by raking and clyſters, and give maſhes, but abſtain from much corn; clothe the head, and keep the ſtable regularly warm, but not hot; and by no means expoſe the animal, even for exerciſe, and avoid giving cold water. Night and morning give, mixed with a maſh, one of the

Fever Powders [page 25]. If there is much cough, treat as under Cough. When the diſeaſe has laſted ſome days, if the horſe appears weak and faint, as is ſometimes the caſe, give malt maſhes, and every morning one of the

Cordial Fever Balls [page 20]. By this means the cure will be ſoon completed; and by keeping him to this diet, and not expoſing him too early, he will avoid being ſo completely out of condition as is uſually the caſe after long colds.

CHOLIC SPASMODIC, called GRIPES or FRET.

The cholics of horſes are of two kinds, extremely different to each other in their nature, and totally oppoſite in their treatment, and hence it requires the utmoſt nicety of diſtinction between them; but which diſtinction being frequently neglected not only by indifferent perſons, but by the generality of farriers, cholic becomes a very fatal diſeaſe, and kills many hundred horſes every year.

The two cholics I hint at are, firſt, that which forms our preſent ſubject, and which is known to farriers and grooms by the names of *Gripes* and *Fret*. It appears to conſiſt of a ſpaſmodic affection or conſtriction of the inteſtines from the application of ſome morbid matter or cauſe, producing, by its irritating quality, thoſe convulſive and painful twiſtings we have reaſon to believe take place in them. The other ſpecies of cholic is that which is known to farriers by the term *Red Cholic*, either from the high coloured urine made in it, or from the dark red appearance it gives the inteſtines. *Red Cholic* conſiſts in a greater determination of blood to the inteſtines, which conſtitutes their inflammation: hence red cholic is what veterinarians call inflammation of the bowels.

The *Gripes*, or *Spaſmodic Cholic*, may be occaſioned by air diſtending the bowels; being let looſe

from green food, particularly when unripe, or in a ſtate of fermentation, as is the caſe when it has been cut ſome time. This ſpecies of cholic is frequent where horſes are ſoiled, from the careleſſneſs of grooms in heaping up the green food in large quantities, and preſſing it cloſe, and particularly from giving it ſtale: it ſhould never be given beyond the ſecond day.

Too *large* a quantity of food may occaſion it: thus horſes newly turned to graſs, particularly into tares, clover, &c., are very apt to have it. After long faſting, when their eagerneſs induces them to eat voraciouſly, cholic is not unfrequent.

Cold, likewiſe, is a cauſe of cholic; but cold water drank when a horſe is warm is the moſt frequent of all the cauſes.

The principal point, is, to diſtinguiſh theſe two kinds of cholic from each other, which an attention to the following circumſtances will generally render not difficult. When a horſe is ſuddenly ſeized with a violent pain; kicking his belly with his hind foot; laying down and ſtretching out his limbs as though dying; ſuddenly getting up again, and when down, rolling on his back; his pulſe being but little affected; breaking out in cold ſweats, but the legs and ears not much altered in their general warmth; the diſtreſs very great, and the pain having ſudden remiſſions;---when all theſe ſymptoms appear, a horſe

may be ſafely concluded to be labouring under the gripes.

But when a horſe is more ſlowly ſeized, and his pain, though violent, is fixed and conſtant, not having intervals of eaſe; when he rolls, if he does not uſually turn on his back; the pulſe likewiſe, and the beating of the heart, not being eaſily felt, but very obſcure; and the legs and ears cold, with a frequent painful ſtaling of a red coloured urine, and appearance of fever, accompanied with coſtiveneſs;---when theſe appearances take place, the horſe may be ſaid to have red cholic, or inflammation of the bowels.

The diſtinguiſhing marks, therefore, between gripes and red cholic are, that gripes uſually attacks very ſuddenly, but red cholic more ſlowly. Gripes uſually preſents ſome intervals of eaſe; but in red cholic the pain is fixed and conſtant: and though, in both theſe cholics, the horſe may lie down and roll, and then riſe again, yet, in gripes, he commonly has a diſpoſition to turn on his back. In gripes, likewiſe, the beating of the heart and pulſe, though it may be a little quickened, is yet as evident as uſual; but in red cholic it is ſmall and obſcure. In gripes there are ſeldom any marks of fever, and the legs and ears remain warm; but in red cholic the mouth is hot and dry, and the legs and ears are uſually cold.

The cure of gripes ſhould be began, if very violent, by bleeding; after which the horſe ſhould be

raked [ſee RAKING], and a very large clyſter of warm water thrown up; or, what may be preferable, the following:

A large onion bruiſed.
Oil of turpentine, two ounces.
Gruel, tripe liquor, or broth warmed, three quarts: mix and inject as a clyſter.

While the clyſter is preparing, one of the CHOLIC BALLS [page 18] ſhould be given, according to the directions accompanying them, and which ſeldom fails to relieve. If the horſe can be walked about, it will be very proper to let exerciſe be given. It has likewiſe been found uſeful in ſome caſes to make a large math, and, after having ſpread it on a horſe cloth, by means of an aſſiſtant on each ſide of the horſe, to apply it as hot as poſſible to the belly. When the Cholic Balls recommended are not at hand, the following may be ſubſtituted:

Ethereal ſpirit of turpentine, two ounces.
Tincture of opium, two ounces.
Caſtor or ſalad oil, a pint.

INFLAMMATION of the BOWELS, called RED CHOLIC.

This, as we have ſaid, is an inflammation of the bowels, and requires a very different treatment from the former, being a much more ſerious but leſs frequent complaint. It may be diſtinguiſhed from ſimple

gripes by its having no ceſſation, or intervals of eaſe; for though the horſe may ceaſe to make violent efforts, from fatigue, yet he will ſtill appear reſtleſs, in pain, and his flanks will heave. To a perſon accuſtomed to feeling a horſe's pulſe, this complaint preſents uſually a great difference to that of gripes; for in this caſe the pulſe is ſmall and oppreſſed, but much quickened; the ears and legs are cold; the mouth dry and parched; and the horſe, though he lies down, from the exceſs of pain, yet he gets up again generally without rolling: whereas a horſe in gripes has a conſtant inclination to roll on his back, the urine is frequently voided in ſmall quantities, and very red.

There are balls and other medicines advertiſed for this complaint; but whoever pretends to cure this kind of cholic by the mouth, either deceives himſelf or the public. The fact is, no medicine can reach the whole line of inteſtines ſufficiently quick to do much good; and, moreover, they are at this time in ſuch a ſtate of tenderneſs and irritation, that even the mildeſt medicines prove hurtful: ſolid food even, therefore, ſhould be denied, and nothing but bran-water, or thin gruel, allowed.

The cure muſt be begun by bleeding, and that very plentifully; ſix or ſeven quarts may be taken from a large horſe: back rake immediately, and throw up ſome warm water; and, if the horſe is

coſtive, a quart of caſtor oil may be given, mixed with a pint of warm water, as a drench: nothing more active muſt be admitted into the ſtomach. But a moſt eſſential circumſtance to attend to, is the raiſing an external inflammation on the outſide of the belly. This may be done by rubbing in two ounces of the

BLISTERING OINTMENT [page 22], melted with two ounces of oil of turpentine; or eight ounces of flour of muſtard may be mixed as in making it for eating, into which two ounces of ſpirit of hartſhorn may be poured to make it more active. This paſte, applied over the belly, and kept there, will raiſe a conſiderable inflammation. But a leſs troubleſome, a more ſpeedy, and leſs expenſive mixture, is the following, which ſhould be well rubbed over the belly, avoiding the ſheath:---

Oil of vitriol, half an ounce.
Oil of turpentine, four ounces.
Mix very gradually.

All the particulars of the treatment muſt be repeated, if complete ſucceſs does not attend the firſt efforts.

CORDIALS.

Cordials and ſtomachics are ſuch medicines as are given either to invigorate the circulation in general, or to act on the ſtomach in particular.

Cordials invigorate the conſtitution, either by their contents being immediately received into the maſs of blood from the abſorbing veſſels, or they act by ſympathy through the medium of the ſtomach: thus a dram, when a perſon is faint, inſtantly exhilarates before it can get into the blood veſſels; but the eating of any thing requires ſome digeſtion before it can invigorate much, becauſe it principally depends on being received into the general maſs of blood for its effects. Nevertheleſs, it is not eaſy to draw exact lines; and all cordials, natural and artificial, act probably in both theſe ways, but in different degrees. Natural cordials may be ſaid to be the common food and drink; artificial cordials, ſuch ſubſtances as we make uſe of to produce an invigorating effect on the conſtitution. Theſe artificial cordials are given to horſes very frequently, and, in many caſes, very improperly. A horſe, as living a life of art, and taking, in ſome meaſure, artificial exerciſe, may ſometimes require a cordial; but to ſuppoſe that whenever a horſe appears dull, or whenever he may have done a little more work than uſual, or whenever he eats a little leſs, that in theſe caſes he always wants a cordial, is erroneous.

But, on the other hand, there are caſes in which the judicious uſe of cordials may do much good. When a horſe has been remarkably fatigued from a long journey, a very ſevere day's hunt, or ſeveral hard-

conteſted heats, the powers of the conſtitution may flag ſo much, that either the horſe refuſes to eat at all, or, if he eats, he has not ſtrength to digeſt; for the circulation, which was kept up by the exerciſe above its natural ſtandard ſo long, now, as the exerciſe is over, diminiſhes below the natural ſtandard as much as it has been before urged beyond it, and with the circulation the whole powers of the conſtitution: any thing, therefore, that artificially ſupports the animal by furniſhing the ſtomach with the means of accelerating the circulation, and keeping up the flagging powers till the conſtitution is able to re-eſtabliſh itſelf, will be of very material aſſiſtance to the animal.

And, again, when a horſe may have been expoſed to cold, and appears rather ſluggiſh from the effects of it, without any ſtrong ſymptoms of diſeaſe, in this caſe a proper cordial prevents the acceſs of what otherwiſe he might the next day labour under, ---*a cold.*

Tender horſes who readily purge, get out of condition, and loſe their appetite on very ſlight exerciſe, very frequently benefit by a cordial. In theſe caſes, one proper cordial ball will frequently prevent the neceſſity of a fortnight or three weeks' active care to get ſuch a horſe into condition again.

Laſtly; after the inflammatory ſymptoms of very ſerious colds are gone off, at the cloſe of fevers, and

particularly where horſes are weakened by ſtrong phyſic, in theſe caſes cordials are very uſeful.

It is not only the caſes that require cordials that ſhould be attended to, but the drugs uſed for this purpoſe ſhould be to the full as attentively examined. Cordial balls have always been a fruitful ſource of gain to farriers, druggiſts, &c.; and but few perſons are aware of the traſh they introduce into a horſe's ſtomach under this name. Even thoſe who compound good drugs, reaſoning from analogy only, make in moſt inſtances as cordials, compoſitions wholly inert. A horſe's ſtomach bears little analogy to a man's. Four grains of emetic tartar irritates the human ſtomach to abſolute danger: four ounces even has not ſo much effect on the ſtomach of a horſe, and twice the quantity could not make him vomit: therefore ſpaniſh liquorice, liquorice powder, aniſeed powder, turmeric, &c., can be readily ſuppoſed to have little effect in ſtimulating the ſtomach and exhilarating the ſpirits of a horſe. Nor, on the other hand, is it ſtrong cauſtic ſubſtances that are neceſſary; but a judicious mixture of ſuch as have been found by experience to raiſe the pulſe without making the mouth dry, and of thoſe that increaſe the appetite to-day, without vitiating it to-morrow; giving permanent vigour, without the conſequent debility ariſing from ſubſtances that act in the temporary manner of a dram.

The CORDIAL BALLS [page 19] are compounded of ſuch ſubſtances; and I can venture to recommend them as a preparation embracing all the advantages pointed out above, and applicable to all the above caſes, as well as all others requiring an active but not heating cordial. There is another kind of cordial; but as it is more particularly applicable to fever, and the cloſe of acute diſeaſes, it will be deſcribed with FEVER.

Stomachics are intended to expreſs ſuch medicines as act more immediately by determining a greater quantity of blood to the ſtomach, hence increaſing the ſecretion of its gaſtric juice, as warm ſpicy bitters, &c.; or thoſe ſuppoſed to act by ſtrengthening its muſcular tone, as bark, ſteel, acids, &c. A very efficacious ſtomachic may be gained in either of the following, given every or every other day.

Oak bark, one ounce.
Aloes, one dram.
Ginger, one dram.
White vitriol, one dram.
Powder finely, and make into a ball.

Or, Oak bark, two ounces.
Tincture of aloes, half an ounce.
Ginger, in powder, one dram.
Forge water, one pint.

Boil the oak bark in the forge water, and, when cold, add the ginger and tincture of aloes.

CORNS.

Corns ariſe from bruiſes on the ſole of the foot, and are occaſioned by the ſhoe loſing its proper bearing, or from a ſtone getting between it and the ſole. They are difficult of cure; but it is erroneous to ſuppoſe them incurable. They produce great tenderneſs; and on removing the ſhoe, and paring the heels, a ſpeck of extravaſated blood may be obſerved within the horn. In this ſtate the cure muſt be begun by removing the whole ſurrounding horn and diſeaſed portion: this opening muſt be ſtopped up with ſome wool, lint, or tow, dipped in tincture of myrrh, but by no means preſſed in. And as preſſure brought on the evil, ſo any thing that continues the preſſure will only aggravate it: to prevent any poſſibility of this, the ſhoe ſhould be properly chambered oppoſite the part, and then put on; and if there is any chance of the ends of the ſhoe making a preſſure on the part, a chambered bar ſhoe ought to be uſed. This being done, the horſe ſhould ſtand on ſoft litter, and by no means be exerciſed till the horn is renewed; after which, it will ſtill farther enſure ſucceſs, if he is turned out to graſs with ſhort ſhoes, or tips only, on the affected foot.

COSTIVENESS

In ſome horſes is habitual, and has various cauſes. Worms occaſion a variable ſtate of the bowels, at one

time lax, at another bound: the cure in this inſtance muſt depend on an obſervance of the directions under the head WORMS. Horſes who perſpire much are frequently coſtive, and wholly dry food has a tendency to produce this complaint, in which caſe a bran maſh now and then is the beſt means to adopt. Active purges are not the proper means of counteracting habitual coſtiveneſs; for, after a purge has worked off, the coſtiveneſs is commonly increaſed; but mild opening ſubſtances, as bran, graſs, malt, &c., form the beſt means of relief.

COUGH.

What I mean here by cough is not that which accompanies other complaints, as inflammation of the lungs, glanders, nor yet broken or even thick wind; though the cough I here mean frequently is a fore-runner of both theſe affections. But ſometimes, without any difficulty of breathing, a horſe has a permanent cough, which is uſually more conſiderable night and morning, after eating or drinking, or on any violent exertion. It is very commonly the effect of a cold, which leaves ſuch an irritable ſtate of the windpipe, that, when cold air is breathed, the difference of temperature between the inſpired and the expired, occaſions repeated convulſive efforts of the cheſt to get rid of the offending cauſe. A permanent cure is ſeldom obtained, unleſs attempted ſoon

after its appearance; in which caſe, bliſtering the throat, keeping the horſe in a mild regular temperature, and giving him, night and morning, calomel, tartar emetic, and opium, to the amount of half a dram of each, will commonly remove it: but, in moſt caſes of cough unaccompanied by fever, I have given with the greateſt ſucceſs, even in thoſe of long ſtanding, the

Cough Balls [page 20], which not only relieve and remove this ſpecies of cough, but likewiſe alleviate that which accompanies thick wind, and prevent either from degenerating into broken wind. A courſe of tar-water or lime-water may be tried alone, or may accompany the uſe of theſe Balls, and which very often relieves. It is common, in this obſtinate habitual cough, for dealers to give, on the morning they mean to ſhew their horſe for ſale, balls of butter or lard: theſe, by lubricating the throat, and leſſening its irritability for a few hours, ſtop the cough. But this trick does not ſucceed when the wind is broken, for in that caſe it is not the upper part of the throat that forms the diſeaſe, but the lungs themſelves.

CRIBBITING.

This affection is prevented by placing a ſtrap round the upper part of the horſe's neck, tightened till the cribbiting action ceaſes, without hurting his breath-

ing. Cribbiters labour under an undeſerved ſtigma it is true they are ſeldom very full of fleſh, but they are in general perfectly fit for all the purpoſes required of them; and though they cannot be warranted ſound, they are but little, if any, the worſe for this peculiar affection. Cribbiting is often the conſequence of a winter's run in a ſtraw-yard, badly ſupplied with fodder: whoever, therefore, turns his horſe to ſtraw-yard for the winter, would do well firſt to ſatisfy himſelf of the humanity and probity of the yard-owner.

CRACKS. See Grease.

CURB.

A Curb is ſometimes an enlargement of the bone at the back part of the hock; at others, it is only a thickening of the ligaments of this part; but in either caſe it is uſually the effect of weakneſs, brought on by ſtrains, by too early or too hard work. In the early ſtage of the complaint it is generally cured by a bliſter once or twice applied.

The Blistering Ointment [page 22] will be found a very efficacious application for this purpoſe; but ſhould the complaint have exiſted a conſiderable time, and great calloſity have taken place, the part ſhould be firſt fired, and the next day the bliſter before mentioned applied over it.

DIABETES,

Or profuſe ſtaling, frequently ariſes from ſomething improper in the hay; ſometimes from muſty corn. Now and then it proves very difficult of cure, but generally it gives way to the following balls:

White vitriol, half a dram.
Alum, two drams.
Extract of bark, half an ounce.
Make into a ball.

Whenever a horſe is obſerved to ſtale frequently, and in large quantities, particularly if the urine appears milky, he ſhould be watched, that the complaint may be early detected; otherwiſe it ſoon wears the animal down, and the length of time of its exiſtence greatly adds to its obſtinacy. Equal parts of lime-water and blood, given as a drench, have been found uſeful, repeated daily. In theſe caſes green food is not proper, but the corn and hay ſhould be of the very ſoundeſt kind.

DIURETICS.

Diuretics are ſubſtances that act by determining a greater quantity of blood to the kidneys, and by ſtimulating them to ſeparate a larger quantity of water from this fluid. The blood, therefore, loſing a larger quantity of its ſerum, or watery part, muſt be ſupplied from other ſources: this is done by the

abſorbing veſſels, which take up, in that caſe, any ſuperfluous fluids they meet with to ſupply the deficiency; therefore it is, that in ſwelled legs, in cracks, in greaſe, or in any preternatural enlargements occaſioned by fluids, we give diuretics with great advantage.

When, likewiſe, the kidneys ſecrete too little, as in gravel, which ſometimes brings on a ſparing and painful flow of urine, we promote a more plentiful formation of it, and a removal of the cauſe, by diuretics: but when the urine is in ſmall quantities, from inflammation of the kidneys, diuretics only aggravate the complaint; for by ſtimulating the kidneys, and driving more blood to them, they heighten the inflammation. Inflammation of the kidneys may be diſtinguiſhed from the common caſes of ſtrangury by the ſymptoms of fever that accompany it, and by the very high colour of the urine. Bloody urine is ſometimes made after very ſevere exerciſe; here likewiſe diuretics are hurtful: plenty of mild diluting liquids are the moſt proper means of cure.

Diuretics, though of great ſervice in the caſes above noticed, ſhould never be given too ſtrong, or too long continued; otherwiſe they may bring on a weakened ſtate of the kidneys. Various ſubſtances are uſed as diuretics; and whatever is uſed as ſuch, acts with infinitely more certainty in the horſe than in man: hence theſe medicines are much more fre-

quently employed in the one than the other. Water, given to a horſe who has been deprived of it for twenty-four hours, proves a very ſtrong diuretic. Nitre, mixed with the food, is frequently uſed as a mild diuretic, and, when it does not gripe, is a very good one. Reſin is likewiſe a very common diuretic; but it is ſtrong and active, and, whenever given, an interval of three, four, or five days, according to the force with which it acts, ſhould be allowed between each doſe. But, to prevent the fatal effects of giving improper ſubſtances, I would recommend, that, whenever an active diuretic is wanted,

The DIURETIC BALLS [page 20] ſhould be made uſe of. Theſe are compounded with great care, and will in every inſtance be found adequate to their intended purpoſe, and yet perfectly ſafe; removing purſiveneſs, ſwellings of the legs, inflamed eyes, &c., as well as looſening the hide, and promoting condition.

When a more mild diuretic is wanted, as is frequently the caſe when a horſe is very weak, or when he cannot be ſpared to lay wholly by, or when it is not convenient to give a ball, and likewiſe in thoſe caſes where diuretics are given merely to promote condition, then

The MILD DIURETIC POWDERS [page 25] are peculiarly proper, being readily eaten with the food, and acting ſo mildly as to need no confinement. Both

theſe forms contain farther practical remarks on the general effects of diuretics, and on the particular rules neceſſary to be obſerved in their adminiſtration.

DRINKS, or DRENCHES.

Many medicines are more readily and properly compounded into drinks than into balls, and ſome horſes take the one more readily than the other. Moſt grooms, oſtlers, and farmers' ſervants, can give a drink, but few are expert at delivering a ball; therefore, in the medicines I have compounded for public ſale, I have, wherever remedies are to be often repeated, and wherever the caſe would admit of it, adopted the form of powders; becauſe, if the horſe refuſes them in his food, they can be infuſed in a drench. The mode of giving drenches is ſufficiently known; the tongue being held by the fingers againſt the jaw, or within the mouth, ſo as to be incapable of puſhing the horn away; the head is elevated by means of a nooſe introduced between the upper tuſhes and grinders; when the drink being poured into the mouth, the tongue is liberated, but not the head, which nevertheleſs muſt not be held too high, or it impedes ſwallowing, and diſpoſes the horſe to reſiſt.

A bottle is not a ſafe vehicle to give a drench from, though it is not an inconvenient one; for ſometimes, in the ſtruggles the horſe makes, the neck may

be bit or broken off. In caſes of locked jaw, a drench might be given by pouring it down the noſtrils.

EXERCISE.

Nothing is ſo convincing a proof of the neceſſity of exerciſe to animals as their love of play in a ſtate of nature; from which natural act we likewiſe infer, that it is much more neceſſary to the young and to the robuſt than to the old and weakly: this remark ſhould influence our domeſtic management of horſes, and of dogs likewiſe.

Horſes and dogs live a life of art when they become domeſticated; ſome of them more ſo than others: a racer and a lady's lap dog are as remote from a natural ſtate as art can make them. Now, as luxury has introduced theſe refinements, nature, in order to keep pace with them, has introduced numerous diſeaſes, unknown in a ſtate of nature: and as animals thus artificially treated have a conſtant tendency to fall into diſeaſe, it is our duty to counteract it as much as lies in our power.

We confine horſes and dogs not only to have them at our immediate call, but to bring them into particular ſtates, which are artificial.

The wind, durability, and emulation of the racehorſe is increaſed by artificial means: the ſame art is requiſite to form the manage horſe's cadences, which could not be retained, was he permitted con-

ſtantly to run at graſs. The ſpeed, docility, and even ſcent, of the ſporting dog is, in a great meaſure, acquired by his education and conſtant practice.

Nature is always equal to her wants, but is never laviſh of her gifts. Horſes in a ſtate of nature are ſtrong and active; they can fight when neceſſary, or they can fly ſwiftly from their enemies; but the profoundeſt philoſopher, and the ſtrongeſt advocate for nature, would confeſs that no Arabian, browzing on the ſimple herbage of the field, would be equal to the continued exertions of Eclipſe: therefore, if we expect peculiar and unnatural exertions, we muſt alſo give unnatural powers; and this we do by our grooming and high feeding: but as this is a deviation from Nature, ſo ſhe always puniſhes it with a tendency to diſeaſe, which we again counteract by art.

Horſes under ſtrong exerciſe require full feeding; and ſo long as the exerciſe is proportioned to their feeding, they ſeldom hurt; but there are times when we do not want to exert them, and yet we wiſh to keep them in a ſtate to be able to it when we do want their exertions; and it is at this time that they frequently ſuffer; for the neceſſity of exerciſe proportioned to their keep is not ſufficiently conſidered, or the time cannot be ſpared, or ſervants neglect them; and thus the horſe becomes purſive, accumulates fat, his legs ſwell, and his heels crack.

and at length become greaſy, and which muſt neceſſarily be the caſe: for the receipts of the conſtitution being great by the high feeding, ſo the outgoings, by perſpiration, &c. &c. ought to be large likewiſe; and if the ſecretions do not find their natural vents, they will find themſelves artificial ones.

The muſcles are compoſed of fibres, having a contractile power, by which all the motions of the body are performed. Theſe fibres act beſt when they are in a right line to each other; but it is not always that they are ſo placed. Every one has ſeen beef, where the fleſhy fibres (which form the muſcles of the ox) were interſperſed with fat: it is the ſame ſometimes with horſes; and theſe muſcles, therefore, having their fibres ſeparated from each other by the fat, cannot act to advantage.

The abſorbents of the body, or the veſſels that are continually taking up both ſolids and fluids, are ſtimulated to act by various means. *Exerciſe* is one of the ſtrongeſt of theſe; it is by this means, therefore, that fat horſes are made lean: for this fat is taken up from the interſtices of the muſcles, and placed where there is leſs preſſure; ſo that the horſe, if well fed, ſtill continues luſty, but the fat becomes more advantageouſly diſpoſed. *Exerciſe* enlarges the muſcles, for Nature endeavours to become equal to her wants; therefore, when horſes or dogs are

trained for hunting or racing, they ſhould have regular and long continued exerciſe. *Exerciſe* improves the wind, by taking up the ſurrounding fat from the heart and cheſt, and thus allowing the lungs to expand: it alſo enlarges the air cells of the lungs; and hence, by imbibing more air, the animal can remain longer between his inſpirations.

To give rules as to what quantity of exertion is neceſſary, we ſhould know exactly what is the age, conſtitution, and feeding, of the horſe. A young horſe requires more than an old one; but, if very young, it muſt then be neither very fatiguing, nor very long continued. Some colts are obſerved to come out of the hands of the breaker with windgalls, or ſplents. A full-fed horſe ſhould have his exerciſe continued for ſome time: if once a day only, not leſs than an hour and a half, or two hours; if twice a day, which is moſt proper, an hour each time. Horſes exerciſing, ſhould be always walked a conſiderable way; they then may be gently trotted, and, if intended for hunting or racing, may be moderately galloped. I am not here giving directions as to the training for either: I am only ſpeaking of exerciſe as neceſſary for health. Many valuable horſes are ſpoiled by ſervants exerciſing them. Grooms have moſt of them a very heavy hand on a horſe, and conceive the principal uſe of the bridle is either to hold on by or to ſtop the horſe: whereas a good rider conſiders the bridle as

having various other important uſes, and as ſuch he wiſhes his horſe's mouth to remain ſuſceptible and tender. Servants ſhould therefore always ride to exerciſe on a ſlavering bit made very thick, and never be allowed a thin ſnaffle. It is uſual with them, when exerciſing, to gallop their horſes againſt each other; and a horſe frequently gets more ſevere exerciſe in one hour's work with the ſervant, than a week's riding of the maſter: to prevent this, horſes ſhould either be exerciſed within ſight of the houſe, or on ſome road where they may be now and then ſeen by ſome one intereſted in the management. Another injury horſes ſometimes ſuſtain in being exerciſed is in their temper; for, if they commit the moſt trivial fault, they are puniſhed by the groom without mercy, which in the end makes them reſiſt, and they become reſtiff: not to mention their heating their horſes, and then ſtopping with them at a public houſe to drink. All theſe evils ſhould be guarded againſt by circumſpection and watchfulneſs. However a horſe is exerciſed, he ſhould never be brought home hot, otherwiſe he frequently contracts ſerious indiſpoſition: this is more particularly hurtful, if, as is frequently the caſe, he is waſhed with cold water, and permitted to dry at leiſure, which is always a bad cuſtom, for the heat and moiſture encourage a determination of blood to the legs, and occaſion ſwelling, and often greaſe. A horſe, there-

fore, ſhould be brought home after his exerciſe as cool as poſſible, and, if waſhed, he ſhould be carefully rubbed dry. Friction may be conſidered as a ſpecies of artificial exerciſe, and as the beſt ſubſtitute; and whenever, therefore, circumſtances prevent exerciſe, a greater ſhare of hand-rubbing ſhould be made uſe of.

EYES.

The eyes of the horſe, from his artificial manner of living, are more ſubject to diſeaſe than thoſe of any other animal we are acquainted with. The diſeaſes of the human eye are more numerous, but leſs deſtructive.

INFLAMMATION OF THE EYE.

Inflammation of the eye, called in human noſology ophthalmia, and among farriers *lunatic*, is a very common diſeaſe among horſes, and a very deſtructive one to the organ it attacks. That it is brought on by ſome alteration from a common or natural ſtate is certain, as the diſeaſe is little obſerved but where horſes live nearly a life of art. Draught horſes are particularly ſubject to this diſeaſe, apparently from the preſſure of the collar preventing the free return of the blood from the head. All horſes ſubjected to violent exerciſe are liable to it, becauſe, under any violent exertion, the breath is held, which prevents the paſſage of blood through the right ſide of the

heart, and hence it accumulates in the head. Young horſes are more ſubject than old, becauſe their veſſels are incapable of reſiſting the increaſed impetus of the blood. The acrid urine confined in hot ſtables is a very general cauſe of the diſeaſe. Want of exerciſe and too full feeding have a great ſhare in the production of the complaint. When the inflammation of a horſe's eyes recurs every five or ſix weeks, the farriers call it lunatic, thinking the moon has ſome influence over the complaint. Sometimes one eye only is inflamed; at others both; and ſometimes they are alternately ſo. After one or both eyes have had repeated attacks of this kind, there appear ſome ſpecks in the centre, or within the pupil: theſe gradually increaſe; and though the horſe may have no more inflammation, yet he goes blind, having, what is termed, a *cataract*.

The cure is ſeldom permanent; it ſhould, however, be attempted by clean ſtables, bleeding moderately, keeping the body open, putting a rowel under the throat; but, above all, the eye muſt be kept covered with a linen cloth, wet with ſome application. Vinegar and water, goulard, ſalt and water, &c, may be tried; but the beſt remedy I have found is the

Eye Water [page 24]. This, applied according to the directions that accompany it, will, in moſt inſtances, remove the complaint, though it will not

always prevent its recurrence. When the affection has laſted ſome time, calomel blown in will often have conſiderable effect in removing the opacity or film. Through the whole complaint a great deal of exerciſe ſhould be allowed, but not of a violent nature. The cuſtom of putting out one eye to ſave the other is a cruel one, but it often ſucceeds.

To prevent the return of the complaint, the cauſe bringing it on muſt be attended to: if the ſtables are too hot, let them be ventilated, and kept very clean; if the horſe is very fat, lower his diet, avoid irregular work, as ſometimes ſevere gallops; at others, intervals of ſeveral days' reſt. Give alteratives, as the *Alterative Condition Powders;* or diuretics of a mild kind, as the *Mild Diuretic Powders.* Avoid drawing for ſome time after an attack; and though, under the immediate effects of the diſeaſe, grazing only adds to the complaint, yet in a young horſe, when he has recovered the fit, a ſix months' run at graſs frequently prevents a return.

In no caſe remove the ſpongy excreſcence at the corner of the eye, by farriers called the haw: this never occaſions the diſeaſe, and its removal always aggravates it.

GLASS EYES.

Horſes ſometimes have one or both eyes of a glaſſy appearance, and greeniſh colour, with the pupil or ſight of one determinate ſhape: ſuch an eye is

blind, however deceptive it may appear. The diſeaſe ariſes either from blood thrown over the retina, or from a palſy of this nervous expanſion. Sternutories, or ſneezing powders, have been uſed, and ſtimulating applications, as brandy, gall, &c., introduced within the eye; but the benefit derived has ſeldom been conſiderable. Dogs now and then have a ſimilar complaint: a remarkably handſome pug in my poſſeſſion, at this time labours under it.

FARCY.

Farcy and glanders have ſome connection with each other; but how much, or of what nature, it is difficult to ſay. Farcy is, however, more worthy of notice in this place, as it is ſometimes curable. Farriers have long ſuppoſed it a diſeaſe of the veins; but it proves to be a diſeaſe of what we have ſpoken of as the abſorbents of the body. The abſorbents of the ſkin follow the track of the veins, and hence farriers thought the diſeaſe had this ſeat. Every one knows that farcy appears in the form of ſmall buds, which are firſt hard and indolent, and then burſt, and diſcharge a thin watery matter, and at laſt degenerate into extenſive ulcers. It appears to be both caught and generated: while it confines itſelf to the ſkin alone, the horſe lives; but when it degenerates into glanders, or attacks the lungs, it ſoon produces its fatal effects. While it is confined

only to the buds, even though they ſhould run matter, it may be cured, provided the poiſon is deſtroyed in each of theſe; but without this, a cure is ſeldom made. In the firſt ſtage of farcy, while it is confined to the buds, the cure may be effected by outward means only, in the following manner: Let the horſe be twitched; then proceed to cut open every one of the buds with a red-hot iron, knife ſhaped; after which, ſprinkle the ſore with verdigris, or red precipitate. In this manner do with every bud, taking particular care to avoid leaving any unattended to, as a ſingle one would enſure the return. The animal may now be turned to graſs, if at a proper time of the year.

But when the ulcers have become extenſive, and the conſtitution is affected, nothing but internal means can ſave the horſe; and theſe even fail in many caſes. The ſores in this ſtage ſhould be waſhed with a ſolution of lunar cauſtic, a dram of it to four ounces of water; but if the expenſe of this is objected to, one ounce of ſpirit of ſea-ſalt may be diluted with the ſame quantity of water; or oil of vitriol; or aquafortis, with water in the ſame proportion. Beſides which, the

Farcy Balls [page 21] ſhould be given, as directed, with unremitting care; but I would likewiſe remark, that as many caſes offer themſelves, when one medicine fails in this diſeaſe, therefore if, on a

fair trial of theſe Balls, benefit does not appear to be derived, any of the following may be tried, as all have in turn ſucceeded under my inſpection, but the compoſition of the Farcy Balls the beſt. Corroſive ſublimate given to the amount of ten grains morning and evening, and increaſed gradually to twenty grains, has ſometimes done good.

Verdigris has ſucceeded, given in doſes of a ſcruple three times a day, increaſed by degrees to a dram. Turpith mineral, in the ſame proportion, has likewiſe now and then done good. Arſenic, in the proportion of the corroſive ſublimate, may be alſo tried. Some praiſe the good effect of crocus metallorum in farcy, given to the amount of half an ounce every day.

Green food has a particularly good effect on this complaint: putting a horſe into tares or clover has ſometimes alone cured farcy: and when graſs cannot be had, the corn may be ſpeared; that is, wetted till it ſprouts, as in malting.

That kind of farcy that appears in the legs only, ſwelling them to an enormous ſize, is to be cured only by a free uſe of the internal medicines, united with warm fomentations of ſtrong alum water.

FEEDING. See STABLE MANAGEMENT.

FEVER.

It is doubted by ſome eminent farriers whether horſes ever have what we underſtand by the word fever, for they think that all the inflammations of the horſe become local and confined; as inflammation of the lungs, of the heart, of the ſtomach, of the bowels, of the bladder, kidneys, or any of the thoracic or abdominal viſcera; and, as ſuch, they conſider all the ſymptoms of fever horſes preſent, as ſymptomatic only; but whoever attends minutely to theſe animals, will obſerve, and that not unfrequently, the diſeaſe of ſimple fever pervading the whole frame, and ſcarcely more prevalent in one part than another. When a horſe appears dull either in the field or ſtable, is at ſome times hot, at others cold, refuſes his food, and ſeems deſirous of water; if to theſe ſymptoms he does not add the appearance of great pain, by trembling, partial ſweating, laying down and rolling, ſtanding with his legs wide, or frequently looking at his flanks, and has no remarkable difficulty of breathing, ſuch a horſe has probably fever.

The cure ſhould be began by taking away three or four quarts of blood, after which back rake, and throw up a clyſter. One of the FEVER POWDERS [page 25] ſhould be given every night and morning in a maſh, if he will eat; if not, in a drench. If on

the ſecond day he ſeems not amended, but is hot, dry, and reſtleſs, with the beating of the flanks conſiderable, take two quarts more of blood from him; and this will be more particularly proper, if, on the ſurface of the blood drawn the firſt day, there ſhould be a thick tough yellow cruſt or coat. The clyſter ſhould be repeated, and the Powders continued. On the third day, unleſs the weakneſs is very great, continue the Powders, keep moderately warm, give bran maſhes and bran water luke warm in plenty to drink. But ſhould the weakneſs prove exceſſive, give malt maſhes, nouriſhing clyſters, and every night and morning one of the FEVER CORDIAL BALLS [page 20], waſhing it down with ale or gruel.

FISTULA.

Fiſtulous ſores are ſuch as have an external opening, with a large ſurface under the ſkin: if the ſinuſes are numerous, they are called by farriers *pipes*. *Pole evil* is an inſtance of bad fiſtulous ſore. *Fiſtulous withers* is another. *Quittor* forms a third; together with ſeveral others. The cure in eſſentials muſt be the ſame. A depending orifice muſt be gained; that is, an opening communicating with the ſkin ſhould be made at the loweſt part of the fiſtula, that the matter may run out freely. This may be done with a common pen-knife, or a lancet; but the beſt method is by means of a long ſeton needle paſſed from the na-

tural opening to the bottom of the wound, and ſo out through the ſkin. But ſometimes even theſe means are not equal to the cure; for the whole ſurface has, in ſome caſes, become ſo diſeaſed, that no healing will take place. In this caſe, the

MILD WASH for GREASE [page 23] may be ſyringed into the wound every day, which will bring on a more healthy action, and heal the ſore: but, ſhould this fail, even ſtronger means muſt be uſed; and the beſt poſſible that I know of will be the

STRONG PASTE for GREASE [page 23]. This ſhould be melted and poured into the pipes, of a proper warmth, neither ſcalding, nor cold enough to become ſtiff. In ſome caſes I have found that ſyringing the part with the

LIQUID BLISTER [page 23] has brought on a cure, when every thing elſe has failed. As the laſt reſource, in the moſt deſperate caſes, the horſe ſhould be thrown, when the whole of the ſinuſes muſt be laid open, and they may be dreſſed with the *Strong Paſte for Greaſe*, in this caſe made ſcalding hot.

FOUNDER.

A foundered horſe is thought by ignorant farriers to be affected in the loins or ſhoulders: but founder is nothing more than an inflammation of the very tender and ſenſible ſubſtance within the foot, the veſſels of which become ſo full of blood, that their

own coats and the ſurrounding nerves become preſſed upon, produce intolerable pain, and become incapable of performing their office: hence deformity of the feet in the end takes place. Founder is brought on by any of the means that bring on inflammation of other parts: riding faſt, and for a long time, on a hard road; riding in ſnow, and then ſuddenly putting the horſe into a very warm ſtable; placing a horſe in cold water when he is hot, &c. As ſoon as the diſeaſe is perceived, which it may be by the horſe's impatience of ſtanding on the affected legs, immediately draw blood from the neck, and likewiſe very freely from the foot, by paring the toe to the quick. The horſe ſhould then be treated altogether as directed in fever, and the feet themſelves kept conſtantly in warm water, which will encourage an oozing of blood from the toe: but, ſhould the diſeaſe ſtill proceed, to prevent permanent lameneſs, he ſhould have his feet pared, and be turned to graſs.

GALLING.

The ſkin of ſome horſes is more tender than that of others; however, all are liable to chafe, from the preſſure of the ſaddle or the friction of the harneſs, and ſometimes theſe caſes are productive of great injury and miſchief to the animal. The galling may be prevented in the tendereſt horſe by placing under the ſaddle a dreſſed lamb's ſkin with the wool on,

or a hare's ſkin with the fur; or any ſkin with the hair remaining and placed next the horſe. When a part has become galled, waſhing with cold water frequently, or placing over the ſore a piece of raw meat, proves uſeful. When the galled part is not yet raw, but there is ſimply a ſwelling, a cloth wet with vinegar or goulard water, conſtantly kept on, will prevent its ſuppurating. The points that the ſaddle or collar particularly preſs on ſhould be frequently examined, and, the moment any ſwelling or fretting is obſerved, the ſaddle or collar ſhould have ſome of its ſtuffing removed from that immediate point: the bearing points by this means are removed to parts leſs tender.

GANGRENE, or MORTIFICATION.

When an extenſive wound is made, particularly if it is much torn, ſome part of it uſually gangrenes as it is called, or mortifies: if it is extenſive, the conſtitution ſuffers; that is, the horſe becomes very weak, and, unleſs ſtrength is given to ſupport the ſeparation of the living from the dead parts, the animal dies. *Gangrene* is known by the dark colour of the part, the peculiar offenſive ſmell, and black thin diſcharge.

Gangrene is always to be conſidered as a weakened ſtate of the part, and as ſuch the whole affected portion muſt be ſtrengthened into action; and if this is

extenſive, the body in general muſt be ſtrengthened likewiſe; that is, the horſe muſt be liberally ſupported with corn and malt maſhes; and if he will not eat, ale and gruel muſt be forced on him. The wound ſhould be dreſſed with camphorated ſpirits of wine, or with an ointment compoſed of equal parts of lard and oil of turpentine. When the offenſive ſmell ceaſes, and the part produces proper matter, the caſe may be then regarded as likely to terminate favourably. The healthy parts ſurrounding the mortified edges ſhould never be cut or ſcarified: that is only producing a greater effect on the conſtitution, and bringing the living into the ſame ſtate as the dead parts.

GLANDERS.

When a horſe has confirmed glanders, it would, perhaps, be better, in every inſtance, to kill him; though there is little reaſon to doubt that the diſeaſe is curable, although the means are unknown to us. A London farrier, of the name of Cunningham, has, I underſtand, a noſtrum that has ſucceeded in a few caſes. By the violent effects it produces, there is reaſon to ſuppoſe it conſiſts of ſome of the mineral acids, as arſenic, corroſive ſublimate, or verdigris.

If a convenient place can be ſet apart, a courſe of the

Farcy Balls [page 21] may be tried, and they now and then do good. The principal caution ne-

ceſſary, is, to diſtinguiſh glanders from other complaints: it is not every running from the noſe that is to be conſidered as glanders, even though it laſts ſome time; for ſtrangles may produce it, or a ſevere cold, a blow on the noſe, or inflamed eye, &c.: but when to the running is added little ulcers within the noſe, the diſeaſe is certain.

GLYSTERS

Are of very great uſe in many caſes: they are always ſafe, and, in general, very eaſy to give; therefore they are peculiarly worthy of notice in a Treatiſe on Domeſtic Farriery. Glyſters are particularly uſeful to open the bowels in the horſe in ſome diſeaſes, becauſe phyſic by the mouth takes ſo long to act, that the animal is often loſt before the effect that is wiſhed can be produced. They are particularly uſeful in thoſe caſes in which it is not proper to give much medicine by the mouth, as in moſt great internal inflammations. They are very uſeful to give nouriſhment to the horſe in thoſe caſes where it cannot be got down the throat, as in locked jaw, ſome inſtances of ſtrangles, wounds of the gullet, or ſtabs of the ſmall guts, long fevers, &c.

When glyſters are given to remove coſtiveneſs, it is always proper to back-rake firſt [ſee RAKING], as it removes any hardened dung that might obſtruct the paſſage of the liquid. The apparatus ſhould be

a large hog's or ox's bladder, capable of holding three or four quarts, with a ſmooth wooden pipe an inch in diameter, and fourteen or ſixteen inches long. The liquor ſhould not be too warm; but the pipe being oiled, the whole muſt be conducted gently, ſo that the horſe may not be ſurpriſed with its being thrown up too ſuddenly.

An opening Glyſter.

Thin gruel, or tripe liquor, four quarts.
Oil, four ounces.
Salt ditto. Mix.

A Glyſter againſt Gripes.

Maſh two moderate ſized onions, over which pour oil of turpentine, one ounce.
Thin gruel, four quarts.

A nouriſhing Glyſter.

Thick gruel, three quarts.
Strong ale, a quart.
Or, Strong broth, two quarts.
Gruel, two quarts.

This ſhould be repeated three or four times a day.

A Glyſter againſt violent Purging occaſioned by too ſtrong Phyſic, or other Cauſes.

Tripe liquor, or ſuet boiled in milk, three pints.
Thin ſtarch, two pints.
Laudanum, half an ounce.

GRAVEL

Is a complaint to which horſes are now and then ſubject. It uſually has its origin from the hardneſs of the water they drink, and from the ſprings being replete with ſmall ſandy particles. Well water is particularly hurtful: pond water is by far the beſt for horſes, eſpecially that which is on a chalky ſoil. In caſes of gravel, the *Mild Diuretic Powders* will be found a uſeful remedy; but if it appears that the hardneſs of the water has occaſioned the complaint, it muſt be changed. A courſe of lime water has ſometimes effected a cure in very deſperate caſes; but a horſe muſt be ſtarved into a voluntary drinking of it.

GREASE.

This diſeaſe may be much more eaſily cured than perſons in general find it; for the generality of farriers, by treating all caſes alike, fail in three out of five. Greaſe is always the effect of ſome deviation from a natural ſtate; that is, horſes in a ſtate of nature never have greaſe: therefore the owner of a horſe having greaſe would always do well, firſt to conſider in what principally the treatment of his horſe differs from the natural habit of the animal; and it is more than probable that this particular is the cauſe

of the diſeaſe, the removal of which alone would tend greatly to the cure.

Thus, when a horſe exerciſes very ſeverely two or three following days in the week, and then reſts entirely the remainder, it follows, of courſe, that the fluids will ſtagnate in the heels, where they have to riſe in a direction perpendicular and contrary to their own gravity. To a horſe very full fed, and who gets, perhaps, only two or three miles of exerciſe every day, it is evident that, the feeding and work of this horſe not being proportionate, the ſuperfluous blood made muſt have an exit ſomewhere: cracks in the heels are thus formed, and ichor or ſerum flows out, and the blood veſſels unburthen themſelves in this way. To a horſe rode through the ſnow, with his legs and heels benumbed, and then put into a warm ſtable without his legs being rubbed, the previous cold having weakened the parts, the warmth is only a temptation, or a drawing of the blood and juices to that part; and the limbs hence ſwell, and greaſe follows. Does a horſe work violently, and yet gets but little food, he falls into a ſtate of debility; that is, he becomes thin and weak. Now his weakneſs is general and univerſal; but thoſe parts the fartheſt from the ſource of life, from the ſpring of the whole, and the fountain of animal warmth,---which ſource, ſpring, and fountain, is the heart;---the parts, as I have ſaid, that are the fartheſt re-

moved from this, which are the hind legs, will, it is evident, ſuffer the moſt; and hence the blood accumulates in them, the parts not having ſtrength to propel their contents; and from this accumulation cracks take place, and greaſe follows. Standing in wet litter may bring it on; and the obliquity of the ſtall, likewiſe, by weakening the parts.

Greaſe, it may be gained from this, may be the effect of too full condition, or it may be occaſioned by too little; that is, by weakneſs. It therefore becomes eſſentially neceſſary, whenever a caſe of greaſe occurs, to conſider whether it is brought on by the exertion being greater than the ſupport, or the ſupport greater than the exertion; for, in the one caſe, we muſt feed the horſe liberally, and leſſen his work; but, in the other, we muſt diminiſh his food, and increaſe his exerciſe.

Greaſe appears under ſeveral forms, and it has ſeveral ſtages. Horſes, when full fed, have ſometimes a *dry ſcurfy eruption* at the heels, with here and there a *ſlight ſcratch*, as it were. Theſe heels itch intolerably, but no great moiſture comes from them: if ſuffered to remain long in this ſtate, they become greaſy. In this early ſtage, waſhing with ſoap and water, night and morning, and rubbing them carefully dry, giving gentle but long continued exerciſe, plenty of grooming, with bran maſhes at night, will

generally remove this ſtage of the complaint. The only internal medicines neceſſary will be the

DIURETIC POWDERS [page 25]. One of theſe may be given every day till the urine flows freely, and then one each other day, continuing the whole of this treatment till the cure is complete.

But when theſe ſcratches become deepiſh cracks, and matter oozes out plentifully, in that caſe, to the above treatment muſt be added the bathing them very frequently with the

MILD WASH for GREASE [page 23], firſt having, for one day, waſhed them well with warm water.

Swelled Legs, with Diſcharge. There is a ſtate or kind of greaſe differing from the former, and which ſometimes comes on very ſuddenly, particularly when a horſe has been for ſome time out of condition. In this caſe the hind legs (but ſeldom the fore) become hot, painful, and ſwelled; and matter, or a watery ſerous diſcharge, iſſues from the cracks. The firſt treatment proper for this kind of greaſe, is, to apply a poultice to the legs and heels formed of bran with warm water, into which put two drams of ſugar of lead. This poultice ſhould be repeated night and morning, till the ſwelling abates, and the parts get into the ſtate of ſimple cracks or ſcratches. A rowel ſhould be put into the inſide of each thigh, and one or two doſes of phyſic may be given. When the ſwelling is completely reduced by theſe means,

combined with plenty of exercife, the cracks may be waſhed with any mild aſtringent: the beſt I know is the

Mild Grease Wash [page 23].

When greaſe becomes confirmed, that is, when there is a general ulceration over the ſkin of the heels, with a peculiar ſmell that ſtrongly characterizes the complaint, the cure becomes more complex; and it will commonly require a ſkilful farrier's attendance, though determined care might render this unneceſſary.

If the horſe is in full condition, the cure ſhould be begun by giving a doſe of mercurial phyſic; but if the horſe is not very full and fat, then the

Mild Diuretic Powders [page 25] may be ſubſtituted; or the

Strong Diuretic Balls [page 20], giving one every fifth, ſixth, or ſeventh day, as they operate. A rowel ſhould be put into each thigh; and if the heels run a thin ichorous diſcharge, then a poultice compoſed of powdered charcoal and oatmeal, equal quantities, mixed with ſtale beer grounds, ſhould be applied; or a fermenting poultice made with water and flour, or oatmeal fermented with yeaſt: either of theſe, after a few applications, will bring the parts to run better matter, when the

Strong Paste for Grease [page 23] may be applied according to the directions contained, and the cure will be completed.

When the legs ſwell much, ſupport may be given by flannel rollers, or rolling hay-bands round them. It is likewiſe often requiſite, in long continued caſes, to complete the cure by a run at graſs.

HAW, or HAWES, of the EYE.

In inflammation of the eye the haw is found to protrude over a part of its ſurface to produce its ſalutary office, that of protecting the weak pupil from the light; but farriers, in theſe caſes, ignorantly regard the haw as the cauſe of the diſeaſe, and cut the protruding part off, which frequently blinds the horſe, and is always cruel and hurtful.

HIDE-BOUND.

This is rather a ſymptom of ſome other diſeaſe than a diſeaſe of itſelf, and may ariſe from any long continued complaint, and is a very common attendant on worms. To effect a cure, the diſeaſe it ſprings from muſt be attempted to be diſcovered; but as ſometimes this is not evident, proceed in the following manner. Clothe the body warmly, give only mild exerciſe, and every night a malt maſh, with which mix the

Alterative Powder [page 25]. By this means a cure will be ſoon effected, provided the horſe is expoſed to no exceſs of cold during the treatment;

for, as the whole of this treatment is intended to determine more blood to the ſkin, a default of which is commonly the principal cauſe, ſo any check at this time muſt peculiarly aggravate the complaint. See CONDITION OF HORSES.

JAUNDICE.

This diſeaſe in horſes ſeldom ariſes from a defect in the ſecretion of bile, but commonly from its redundance, or diſeaſed quality; hence is often accompanied with purging. Now and then, however, it is accompanied with coſtiveneſs.

In jaundice, the horſe is dull and heavy, the appetite bad, the urine dark coloured, and the eyes and mouth yellow. When fever is preſent, the diſeaſe ariſes from inflammation of the liver, and muſt be treated as other inflammations.

The cure of jaundice, when there is coſtiveneſs, will conſiſt in giving three doſes of

STRONG MERCURIAL PHYSIC [page 22]; but when the bowels are already looſe, the following will be preferable, given every morning:

Calomel, one dram.
Opium, half a dram.
Powder of chamomile flowers, and powder of gentian, of each two drams.
Make into a ball with honey.

INFLAMMATION OF THE LUNGS.

Inflamed lungs is a very frequent diſeaſe among horſes, and kills more of them every year than any other complaint. Nothing ſo much ſhews the improved ſtate of farriery in this country as this diſeaſe: heretofore, when a horſe died of inflammation of the lungs, he was thought to have died rotten; and, therefore, during the complaint, hot ſpicy cordials were uſually given, which only haſtened the fatal termination. The progreſs of this diſeaſe is commonly very quick, and in thirty-ſix or forty-eight hours from the attack the horſe is often dead. The treatment muſt, therefore, be very active to be efficacious; for a leſs active treatment, if it ſucceeds, is only temporary in its ſucceſs; for though the horſe appears to amend from the firſt violence of the attack, yet water is formed in the cheſt, and a ſecond attack ſoon comes on, and proves fatal.

It is of great conſequence to be able to diſtinguiſh this diſeaſe from any other. When a horſe is found dull, holding his head low, with a difficulty of breathing, and quick heaving flanks, uneaſineſs and anxiety in the countenance and manner, but no fury, as in cholic, or other inflammatory affections, it may be conjectured he has inflamed lungs; and if to theſe are added cold legs and ears, with a hot

mouth, and a very obſcure beating of the heart, the caſe is certain.

But the ſtrongeſt characteriſtic ſymptom is, that the horſe hardly ever lies down in this diſeaſe, till he falls from weakneſs.

The principal treatment to be depended on in this complaint conſiſts in active bleeding, and bliſtering. No time muſt be loſt; but as ſoon as the complaint is aſcertained, take ſeven quarts of blood from a cart-horſe, ſix from a hunter or roadſter, and four from a galloway or poney; after which, the beating of the heart will probably become more evident. On letting this blood cool gradually, without ſhaking, it will exhibit a white or yellow tough cruſt over the red part: this warrants a repetition of the bleeding preſently. As ſoon as the firſt blood is drawn, back-rake, and throw up the opening clyſter; after which, rub the ſides of the cheſt, and between the fore legs, with the following:

Oil of vitriol, half an ounce.

Spirits of turpentine, two ounces.

Venice turpentine, two ounces.

Melt and mix the two turpentines together, and to which very gradually add the oil of vitriol.

The reaſon of applying this mixture is, that it inflames more ſpeedily than a bliſter, and hence is far preferable; but when this is not handy, apply the bliſter deſcribed under that article; and if a caſe

ſhould occur where neither can be procured, ſcald the cheſt with a ſcalding hot maſh; but either of the other applications are preferable.

The legs ſhould now be very well hand-rubbed, and then bound up in hay-bands, but not tightly. The horſe muſt likewiſe be warmly cloathed, but the ſtable ſhould be rendered cool, though not cold.

A Fever Powder [page 25] may now be given in a horn of warm water; and, in three hours from the firſt bleeding, if the beating of the heart is ſtill obſcure, and the breathing difficult, take away two thirds of the original quantity of blood drawn, without fear, and renew the application to the ſides.

After the firſt ſymptoms are removed, if there is great weakneſs, give thick gruel, with malt maſhes; but avoid heating cordial drinks.

LAMENESS.

Lameneſs may be the conſequence of ſtrains in the muſcles, ruptures of the tendons or ſinews, or of ſome of the ſmall ligaments. It may originate alſo in ſplents, ſpavins, ring-bones, thorough pins, &c.; or it may, as is very uſual, ariſe from ſome diſeaſe within the foot, as contraction, founder, thruſh, &c. When a horſe becomes lame, it is ſometimes no eaſy matter to fix upon the right limb; and, even if that is aſcertained, what part of that limb is affected is often very difficult to determine on. When a recent

ſtrain takes place, there is generally heat in the part; therefore the firſt thing to examine, is, whether all the limbs are equally cool, and each limb in every part.

A ſtrain in the ſhoulder is known by the heat; beſides which, the horſe uſually reſts his toe only on the ground, or, if he ſtands on it, he points the foot very forward. When he walks, he drags the limb, and ſwings it round; and going down hill appears to diſtreſs him very much. When the ſtrain is of long ſtanding, the ſhoulder is frequently found to be waſted.

Lameneſs in the paſtern uſually ſhews itſelf by the paſtern being carried more upright in action, and the whole limb likewiſe more ſtraight; and though the horſe willingly bends his ſhoulder and knee, yet he carries the leg in general but little forward.

Lameneſs in the foot is diſcovered by the violent catches the horſe gives in his paces, to take the weight from off the affected foot, which is not ſo obſervable in other caſes.

Strains of the back ſinews, when recent, always are accompanied with heat; and when old, with a hard ſwelling.

Bony ſwellings, as ſplents and ring-bones, are evident to the eye.

When *the loins are ſtrained*, the horſe has a moſt irregular gait: he crouches as he walks, and flinches from any weight on his back. In the ſtable he ſtands

with his legs all together. If the hand is drawn down the back, he flinches from it; and this ſign ſeldom, if ever, fails.

Lameneſs in the whirl-bone, or joint of the thigh with the body, is known by the peculiar and low dropping of the haunch, more than in any other lameneſs.

Lameneſs in the ſtifle is known by the circuitous motion of the limb, to prevent the bending of the joint between the leg and thigh.

Spavins and *thorough pins* are evident to the eye.

Founder produces a lameneſs often miſtaken among farriers for either ſhoulder-wrench or ſtrained loins; for, when the fore feet are foundered, the horſe ſtands with his hind legs under him, to relieve himſelf from the weight before; and when the hind feet are affected, which is leſs frequent, he ſtands with his fore feet under him, to relieve the hinder extremities. When all four feet are affected, he obſtinately refuſes to riſe. For the cure of theſe various lameneſſes, ſee the articles themſelves.

LAMPAS.

The ſwelling at the roof of the mouth of young horſes, ſo called, frequently gives way to a little alum and honey rubbed on; but if it is thought proper to ſcarify, it ſhould be done very lightly, to prevent unpleaſant conſequences.

LOOSENESS.

Some horſes, particularly thoſe with ſmall carcaſſes, have looſe purging ſtools on the ſlighteſt exertion: grooms and dealers call theſe waſhy horſes, and it is found that they are not capable of much continued labour. In other caſes it comes on as a ſudden diſeaſe, occaſioned by different cauſes. Horſes commonly purge on changing their food from dry fed to graſs. It is ſometimes brought on by cold, and likewiſe by the application of ſome morbific matter in the air; or ſomething of this kind may be generated in the ſtomach. Now and then it ariſes from an increaſe of bile, in which caſe the ſtools are black and fœtid. See JAUNDICE.

A continual dropping of a little excrement muſt not be miſtaken for purging, for this may take place in abſolute coſtiveneſs, and in dyſentery; but in the real diarrhœa, or looſeneſs, the ſtools are copious and liquid.

The cure may be begun by ſtarch clyſters, and the following drink given immediately upon it.

Take opium, two drams.
Powdered ipecacuanha, three drams.
Prepared chalk, four ounces.
Powdered ginger, two drams.
Boiled ſtarch, a pint.

Mix, and give morning and evening.

The fupergation brought on by over-ſtrong phyſic, is treated of under the head PHYSIC.

LOTIONS, or WASHES,

Are liquid applications, choſen in this form for the convenience of compounding, or of application. The waſhes I have thought proper to compound, and keep ready prepared in my arrangement of medicines, are,

MILD WASH for GREASE [page 23].

EMBROCATION for STRAINS [page 24].

LIQUID SWEATING BLISTER [page 23].

EYE WATER [page 24].

WASH for the CANKER in the EAR of DOGS [page 28].

Lotions are rubbed in with the hand, if ſpirituous; but if merely aqueous, and it is neceſſary that they ſhould produce their effects ſlowly, as in *eye-water*, *embrocation for ſtrains*, &c., it is better to keep a cloth moiſtened with them over the part.

LOCKED JAW. See STAG EVIL.

MANGE.

This diſeaſe is not only generated by filth, and low living, but it may be caught. It ſhews itſelf by the animal's rubbing and biting himſelf; by the hair coming off, and leaving the ſkin ſcabby.

The MANGE OINTMENT [page 24] is the moſt effectual application, and never fails of curing; and ſeldom requires any other aſſiſtance than one or two applications of it. If, however, the horſe is too fat, it may be proper to bleed once; and, if very lean, he ſhould be better fed. Cleanlineſs is neceſſary in either caſe. When the diſeaſe is of very long ſtanding, it might be prudent to give a courſe of the

ALTERATIVE CONDITION POWDERS [page 25].

The ſtall a mangy horſe has been in ſhould be waſhed with lime and water to prevent infection, and the appointments he has ever worn ſhould be carefully waſhed and dried.

MALLENDERS and SELLENDERS.

The firſt is a ſcurfy eruption at the back of the knee joint; the ſecond, a ſimilar breaking out within the ply of the hock. Waſh with ſoap and water every day, and rub in a little mercurial ointment after each time; or a little of the

STRONG PASTE for GREASE [page 23] will cure alone, being once well rubbed in.

MOULTING.

Nature is ever equal to her wants, but ſhe is ſeldom ſuperfluous. In autumn, as winter approaches, the coat of the horſe in common with many other animals, lengthens, and much new hair is added alſo; but that nothing may be given in vain, in the

ſpring, a new coat, ſhort, fine, and adapted to the approaching warmth, is given. Theſe changes are called moulting; and the forming theſe coats appears to call much of the powers of the conſtitution forth; for at this time there is a great debility pervading the animal frame, and the horſe is very dull in ſpirits: in ſome inſtances this becomes ſo great as to approach diſeaſe. When this is the caſe, the exerciſe ſhould be moderated, and malt maſhes given; and ſhould it ſtill continue obſtinate, and the hide becomes bound, it will be highly proper to give a courſe of the

ALTERATIVE CONDITION POWDERS [page 25]; and, after they are finiſhed, to complete the cure, give a

MERCURIAL PURGING BALL [page 22].

POULTICES.

Bread would be too expenſive an article to make poultices of in common caſes. Bran, therefore, is very commonly uſed; and, to give it a proper conſiſtence, ſome linſeed meal may be mixed with it; or, in default of this, a little of any other meal. A *poultice* ſhould be made of a ſufficient conſiſtence, that it may not run through the cloth it is put in; and yet it ſhould not be ſo thick as to dry too quickly, for a poultice acts principally by its moiſture; therefore it ſhould be frequently wetted through the

cloth with the predominating fluid, of whatever kind. In applying poultices to the legs, care ſhould be taken not to tie them too tight, as is frequently done, and thereby the miſchief aggravated inſtead of relieved. A piece of broad liſt is, for this reaſon, very proper to faſten them on with. They ſhould never be applied too hot; very little good can be derived from it, and much pain may be occaſioned. A hot poultice ſoon comes to the heat of the part; and as, in moſt caſes requiring poultices, the part at the moment of application is in a ſtate of comparative debility, too great heat only farther weakens it.

No. 1. A COMMON SOFTENING POULTICE.

Bran, any quantity; pour on it boiling water, to form a thin paſte; add linſeed meal ſufficient to make it adheſive. After this, ſtir in one or two ounces of ſweet oil.

No. 2. A COOLING POULTICE.

Inſtead of common water, form the above with goulard water.

No. 3. A POULTICE AGAINST GREASE. [See GREASE.]

No. 4. A POULTICE AGAINST GANGRENE.

Linſeed meal, or flour, any quantity: mix with boiling water, and ferment with a table ſpoonful of yeaſt; and, as it riſes, put in an ounce of oil of turpentine.

POLE EVIL.

As this is only to be regarded as a fiſtulous ſore, ſo its treatment, when it has broke, is the ſame as is deſcribed under the article FISTULA.

But before it breaks, it muſt be treated as a common inflammation; that is, by bleeding, keeping the horſe low, and conſtantly applying the ſaturnine or goulard poultice [ſee POULTICE, No. 2], and never making uſe of hot, ſpirituous, or oily embrocations, when it is in this ſtate, as that only advances the diſeaſe. The cooling treatment muſt not be connued after the tumour is felt to fluctuate, that is, after it feels ſoft: in this caſe the horſe muſt be better kept, and the common poultice [ſee POULTICE, No. 1] applied till it breaks, or is fit to open, which ſhould be done with a ſeton needle paſſed from the top of the tumour to the ſide, ſo as to let out all the matter gradually. If the tumour is large, from the top opening, another ſeton ſhould be paſſed through the other ſide, as near the bottom of the ſac, or abſceſs, as poſſible. After this, treat exactly as is deſcribed under the head FISTULA, having recourſe to the ſcalding mixture there deſcribed, if the caſe proves obſtinate.

POWDERS.

Powders are medicines prepared in a dry pulverized form, and are hence convenient for carriage

and package. They are very convenient likewiſe to adminiſter, becauſe they may be made into either a drink, or a ball; or they may be mixed with food, if not very nauſeous. Powders, however, when compoſed of any thing very volatile, are apt to ſpoil: they ſhould, therefore, in theſe caſes, be kept very dry and cloſe. In my prepared medicine arrangement, I have compounded as powders only ſuch articles as will readily preſerve themſelves, without any particular precaution. I have compounded into powders ſome articles, becauſe then it is optional with the giver what form he will chuſe to give them in, as ſome horſes will not readily take balls, and many grooms and oſtlers cannot give them; but moſt horſes will take, and moſt perſons can give, a drink: ſometimes, however, even this trouble may be avoided, for the powders ſprinkled with the food will be readily eaten. Of this kind are the

ALTERATIVE CONDITION POWDERS [page 25].
WORM POWDERS [page 25]; and
MILD DIURETIC POWDERS [page 25].

PHYSICKING HORSES.

This is a very important ſubject, and deſerves very attentive conſideration; and though I ſhall introduce here all that is practically neceſſary, yet thoſe who wiſh for more extended information will find it in my Veterinary Outlines, vol. ii. page 760.

It has been the opinion of ſome modern veterinarians, that purging is not ſo neceſſary to horſes as it has been thought; but though there is reaſon to think that purging is often made uſe of when unneceſſary, yet this opinion has led into error; for horſes are, in many caſes, more benefitted by purging than any other animal; and it is certain that they cannot be got into condition ſo readily by any other mode. But one thing is likewiſe certain, and allowed by all who conſider the ſubject attentively, that there is no occaſion, in any caſe, for the violent purges grooms and farriers commonly make uſe of; on the contrary, they, in all caſes, do much miſchief, weakening the ſtomach and bowels, and even the conſtitution, for a great length of time, and they not unfrequently prove fatal.

Horſes are *purged* to bring them into what is termed condition; that is, into a ſtate in which they are fitted to undergo active exerciſe, having wind enough to render it eaſy to them, and ſtrength enough to continue it. *Purges* are given likewiſe to remove worms: in this caſe the doſe ſhould be tolerably ſtrong, to diſlodge them, if poſſible; and it is thought mercurial phyſic is particularly adapted both to kill and remove worms. *Phyſic* is given to remove ſwellings from the legs, or other parts of the body. It produces this effect by purging out the fluids of the ſtomach and bowels, by which means the abſorbing

veſſels remove the fluid from the legs to make up the deficiency. *Purges* are given to remove too great fat, the fat being one of the fluids; and the body becomes abſorbed to ſupply the waſte occaſioned by the purging: thus the fat that was too redundant, and hindered the lungs from expanding, and the muſcles from contracting, is removed; and hence the horſe becomes more vigorous and laſting, and his wind ſtrengthened;---and this is called being in condition.

Horſes are, ſome of them, purged more eaſily than others: hence the firſt purge ſhould be mild; for, if it does not operate, it does no harm, though it is often erroneouſly ſuppoſed ſo to do.

From the horizontal poſition of the body, and the long track of inteſtines, with their peculiar ſtructure, it requires not only a medicine of conſiderable ſtrength, but likewiſe it requires a long time to purge a horſe. It is from this cauſe that purging affects the conſtitution infinitely more in a horſe than in ourſelves: but it does not require ten or twelve days for a horſe to recover himſelf between each doſe, as is uſually ſuppoſed, unleſs the operation has been very ſevere, which is always hurtful, and unneceſſary.

Exerciſe is of particular importance in phyſicking; but I do not recommend very active trotting: briſk and continued walking, or, at moſt, a very gentle trot, is to be preferred. The importance of exerciſe

is by no means ſufficiently conſidered: half the quantity of any purge, with plenty of walking exerciſe, will purge nearly as much as double without; ſo that the degree of purging may be always regulated nearly to our wiſh, and which is a very deſirable circumſtance; but it is again to be obſerved, that faſt trotting is not adviſable at any time.

The exerciſe ſhould be proportioned to the phyſic's working: it ſhould be continued at ſhort intervals of two hours, till it operates favourably, and then may be omitted, as it would fatigue. Cold water ſhould never be allowed; but if the horſe will not drink it warm, it may be cool, but never cold.

Unleſs a horſe is very open in his body, he ſhould always be prepared for phyſic, one or two days at leaſt before, by bran maſhes.

During the working, he ſhould be kept warm; and he muſt be exerciſed (if in winter) in cloaths proportioned to the cold.

A purge is to be given thus:---A horſe having faſted an hour or two in the morning, the ball is to be given him; after which he ſhould be offered ſome warm water, as it will not be improper to let him have his ball a quarter of an hour after he has had about half his uſual quantity of water only lukewarm; for it ſometimes happens that the ball diſguſts him, and then he will not drink for ſome hours after, which is not ſo favourable. After the ball is given,

he ſhould be faſted another hour, or an hour and a half, when a ſmall quantity of good hay may be allowed, or a bran maſh, with a very few oats ſprinkled in it, to make it palatable: he ſhould, at noon, be walked for half an hour, and again half an hour in the evening, being allowed warm water during the day, and hay and bran mathes again towards night.

Early on the following morning the phyſic will probably begin to work, which if it does briſkly, no more exerciſe need be given; but if not, an hour's walking motion ſhould be allowed, when the horſe may have a maſh, and his warm water. After this, another hour's exerciſe ſhould be given (walking only), and which is to be repeated every other hour or two, till the phyſic works kindly, allowing mathes, clean hay, and warm water between times. Should the horſe appear griped and uneaſy, a warm clyſter of the common kind may be given, which will generally relieve with exerciſe; but if the griping ſtill continues, which can hardly ever be the caſe when good phyſic is uſed, then the following drink will at once remove it.

Sound ale, a pint and a half, into which pour two table ſpoonfuls of Hollands, or gin, and give it rather more than blood warm.

On the next day the phyſic will be uſually ſet; that is, the horſe will ceaſe to purge: ſhould it, however, continue with violence, he muſt have a drench

of thin ſtarch, and ſtarch and tripe liquor as a clyſter; but this ſuper-purgation only happens when very ſtrong coarſe phyſic has been uſed.

The horſe may now return to his former habits, giving him corn at firſt rather ſparingly, with moderate exerciſe; and, in three or four days from its ſetting, if the operation has been only moderate, a *ſecond* doſe may be given, which is ſometimes required a little ſtronger than the firſt; and after this, if deemed neceſſary, a *third*, which is uſually conſidered a courſe of phyſic.

When, as is ſometimes the caſe, the phyſic that has been given is too ſtrong, a ſuper-purgation is produced that proves troubleſome to ſtop, and now and then fatal. Grooms and farriers frequently fall into this error, from a miſtaken opinion that violent purges alone cleanſe the animal. This overpurging ſhould be treated nearly as is directed under the head Looseness, except that inſtead of the chalk introduced in the drink, four ounces of port wine may with propriety be ſubſtituted.

PHYSIC, FORMS OF.

The ſubſtances uſed to purge horſes are uſually compounded in the form of balls, by which their nauſeous taſte becomes hid. Jalap, rhubarb, ſalts, &c., are not found to purge a horſe, at leaſt not ſo readily as has been ſuppoſed, and they are, therefore,

abolifhed from the prefcriptions of intelligent farriers. Caftor oil is fometimes ufed, and with great propriety, in cafes that do not admit of rougher cathartics, as in inflammation of any of the internal organs, cholics, &c. The preparations of mercury, particularly calomel, are given as purges; but from their peculiar properties, and difpofition to gripe and falivate, are feldom given alone, but as auxiliaries to other fubftances, as aloes. Mercurial purges are peculiarly fitted for horfes having worms, or when there is much water in the fyftem, or fat; but as merely condition phyfic, they are not, perhaps, fo advifable.

But the moft common fubftance ufed as phyfic is aloes; and which, when properly prepared, and when the aloes themfelves are of a good kind, is certainly not only the moft convenient, but the beft phyfic. It is, however, too common to powder aloes very grofsly, which alone frequently occafions gripings and other bad confequences; but when to this defect is added a bad quality in the aloes themfelves, fuch as is often found in the coarfeft kinds of Cape and Plantation aloes, the mifchief is commonly ferious. It is ufual, likewife, to introduce too much heating fpice, or oils, into phyfic, which often inflame the bowels.

Aloes fhould be of the very beft kind, and very finely powdered; and the quantity given, regulated

by the ſize, age, and ſtrength of the horſe, from three drams to ten. But that no miſtake may ariſe about proportions, and that ſuch phyſic may be always obtained as perſons may be aſſured are prepared of the beſt drugs, and in the moſt judicious manner, there enters into my medicine arrangement the following varieties of purges:---*Strong Purging Balls*, ſuitable for ſtrong horſes; *Milder Purging Balls*, adapted for the firſt doſe given to moſt horſes, and likewiſe thoſe that are leſſer or weaker. There are alſo

STRONG MERCURIAL PURGING BALLS, and MILD MERCURIAL PURGING BALLS [ſee page 22, medicine arrangement].

PURGING. See LOOSENESS.

QUITTOR.

In a Domeſtic Treatiſe on Medicine, more, perhaps, may properly be ſaid on the prevention of this diſeaſe than on the cure; as the one is often eaſy, and the other muſt claim the aſſiſtance of the experienced farrier.

A quittor almoſt always ariſes either from a wound or bruiſe on the coronet, or from a nail prick; either of which, if taken in time, would hardly ever produce this diſeaſed ſtate. But when one or the other has been neglected, inflammation follows, and an abſceſs forms within the coffin, which at laſt makes

its way out at the quarters above the coronet. The only proper method is that which farriers term coring out the wound; for curing it by cutting is ſome months about, and leaves an irreparable blemiſh, and often a falſe quarter. When the direction of the fiſtulous ſores forming the wound is aſcertained, ſome of the

STRONG PASTE for GREASE [page 23] ſhould be mixed with flour, ſo as to make it hard enough to be forced with a probe to the bottom of all the fiſtulous pipes; or blue vitriol coarſely pounded, and mixed with pitch or tar, may be introduced. This raiſes a conſiderable inflammation, the conſequence of which is, that a large ſlough comes out, which farriers call the core; and if the ſubſtance has reached the whole of the ſinuſes, the wound then heals; if not, it muſt be repeated. The principal management is in introducing the ſubſtance to the bottom, and into all the pipes, or ſinuſes.

There is a ſpecies of quittor brought on by preſſing the inner calkins of the ſhoe on the coronet; for this reaſon the ſhoes ſhould have only the outer heel turned.

BACK RAKING

Is a method of emptying the bowels by means of the hand. The right hand arm (if poſſible, of a ſmall man) being ſtripped, and oiled; with the left hand the

tail is drawn aſide, when the right hand, being made as ſmall as poſſible, and cone like, is gently introduced up the fundament, and any quantity of hardened excrement the hand meets with carefully removed in ſmall pieces. From this it will at once be evident that *back raking* muſt be uſeful in a vaſt variety of caſes. It ſhould always be made uſe of previous to giving a clyſter, otherwiſe the hardened matter may prevent the paſſage of the fluid. It is alſo always proper in cholic; and in all caſes of coſtiveneſs it ſhould never be diſpenſed with.

RING BONE.

This is a bony ſwelling about the coronet. When it has been of long ſtanding, it is ſeldom curable; but in early caſes a bliſter may be tried. See BLISTERS.

And if this is not found ſufficient, firing muſt be had recourſe to.

RISING OF THE LIGHTS. See INFLAMMATION OF THE LUNGS.

ROT IN HORSES.

In the north of England, and, indeed, in many other parts, *the rot* is made to expreſs either inflammation of the lungs, or inteſtines, or liver, or of any internal organ, becauſe the gangrenous appearance

of theſe parts in theſe caſes makes farriers conclude that their horſes have long been rotten: but improved farriery has now not only given more proper terms to theſe diſeaſes, but has taught us how to diſtinguiſh them from each other, from whence has ſprung a more active and judicious mode of treatment.

ROWELS.

Theſe, like bliſters, act by inflaming the ſurface, whereby more deep-ſeated inflammations are removed. The mode of making a rowel is well known. A ſlit being cut in the ſkin, about an inch in length, the finger is introduced to ſeparate the ſurrounding ſkin from the fleſh, &c., leaving, by this means, a circle of the ſize of half-a-crown, into which is introduced a piece of ſtiff leather of the ſame ſize, ſmeared over with bliſtering ointment, or yellow baſilicon. The ſooner the inflammation is wiſhed to be raiſed, the more active is the ſubſtance we chuſe to put on the leather; hence, in riſing of the lights, in red cholic, ſtaggers, &c., when we uſe rowels, it is proper to ſmear the leather with bliſtering ointment. Rowels are of great ſervice as a drain in farcy, ſwelled legs, inflammation of the eyes, greaſe, &c. &c. The parts they are uſually placed in are, under the throat, between the fore legs, along the belly, and within ſide the thighs.

SADDLE GALLS

Are uſually eaſily removed by bathing them with the

EMBROCATION for STRAINS [page 24].

SAND CRACK.

This is a diviſion of the horny fibres of the hoof from above downwards in the form of a crack. It is ſometimes coming on at once by a ſudden ſplitting of the hoof, more frequently on the outer than the inner ſide, and more uſual in the fore than the hinder feet; but the moſt frequent cauſe, is, a wound of the coronet by a tread, puncture, or too free uſe of the raſp in ſhoeing.

To cure, the principal circumſtance to be attended to, is, to prevent the communication between the crack and the new horn, or as this grows it will take on the opening likewiſe. The hoof ſhould therefore be thinned when the crack exiſts, and at the upper part a tranſverſe ſection ſhould be made a little way acroſs: the crack ſhould then be kept carefully cloſed by binding a bandage tightly around the hoof; for if the edges of the vaſcular ſubſtance come between the edges of the crack, it gives intolerable pain; and it is this that brings a horſe with ſand crack nearly to the ground by thoſe ſudden jerks that are obſerved in them. Oppoſite the part, the ſhoe ſhould be ſlightly cham-

bered, which gives a diſpoſition to the divided edges to come together.

SPAVINS

Are of two kinds; blood ſpavin and bone ſpavin. *Blood Spavin* conſiſts, outwardly, of an enlargement of the vein that paſſes over the inſide of the hock; but, inwardly, there is another enlargement, which is, in fact, the real cauſe of the diſeaſe; this is in the mucous reſervoirs that lubricate the joints, the nature of which enlargement is ſimilar to windgalls below; ſo that, in fact, blood ſpavin is only a windgall of the hock, and the enlargement of the vein is only the conſequence of this windgall: therefore it is evident that taking up this vein, as is uſually practiſed, can only afford temporary relief. *Blood* or *Bog Spavin*, as it is ſometimes called, does not often occaſion lameneſs till it is very large, in which caſe bliſters and reſt give ſome relief: but it is ſeldom that a permanent cure is obtained.

Bone Spavin, in its early ſtate, may be known by the lameneſs it occaſions in the hock, and the heat of the part; but the ſwelling is ſeldom conſiderable at firſt. It is at this time only we are at all certain of a cure, which may be uſually brought about by an active bliſter. If it ſhould not give way to this, fire, and apply at the ſame time another bliſter. In the advanced ſtages of it, when the ſwelling is of long

ſtanding, bliſter actively; and as ſoon as quite well, fire, and bliſter over it.

SPLENT.

Splents are uſually ſituated on the inſide of the fore legs under the knee, and are to be treated exactly in the ſame manner as bone ſpavins. Splents are brought on by being too early put to work: and there is another very common cauſe, but not uſually attended to, which is the raiſing the outſide of the foot by calkins, or by a thick heel, which, throwing the weight on the inner ſide, puts the parts on the ſtretch, and weakens them.

STABLE.

The limits of this little Treatiſe do not permit more than a few hints, of the more important kind, on this ſubject. Stabling of horſes, as it is wholly a deviation from nature, ſo it is ſurely paving the way to the attack of many diſeaſes; and we really find that the higher this artificial ſyſtem is carried, ſo much the more are the horſes who are the ſubjects of it obnoxious to diſeaſe. As, therefore, our comforts and convenience have made a life of art neceſſary to theſe animals, and thereby rendered them liable to diſeaſe, ſo ſhould our endeavours be turned towards the prevention of thoſe maladies, which a little attention will, in moſt caſes, in a great meaſure effect.

A ſtable ſhould be airy: in nothing are the horſemen of this country more erroneous. However congenial warmth may be to the conſtitutions of horſes, particularly of the blood kind, as being originally natives of a warm climate, it is ſelf-evident that breathing and re-breathing the ſame air, as muſt be the caſe in all cloſe ſtables, muſt be pernicious; and as being completely removed from what in a ſtate of nature they muſt enjoy, it muſt be highly productive of diſeaſe. The very great difference of the temperature without doors and that within ſubjects horſes kept ſo warm to that vaſt chain of diſeaſes ariſing from what is termed catching cold. A ſtable ſhould be only moderately warm, and it ſhould be always ventilated; the ventilation ſhould likewiſe be as near the top as poſſible, for the foul air is always uppermoſt. Where the ceiling is low, and there is no large window, there ſhould be a tube or funnel paſſing up through the ſtable ceiling, and through that of the loft above, and which is the moſt effectual way of ventilating poſſible: the tube ſhould be funnel-ſhaped towards the ſtable, giving, by its bell mouth, a greater freedom to the foul air to paſs off. A ſtable ſhould likewiſe be very light; when it is otherwiſe, the new received light the horſe gains when he goes out, is a painful ſtimulus to the eyes, and his imperfect viſion makes him ſtart; and, however horſes may fatten in dark ſtables, it muſt be the fat of

a pig, and not with the luſty and cheerful gain of a horſe, open to the cheering influence of the ſun. Stables ſhould be well ceiled, and that very cloſely; when this is not the caſe, not only is the duſt from the hay-loft coming down on the horſe, and frequently in his eyes, but, what is as bad, and much leſs thought of, the foul air, which is always uppermoſt, lodges in the hay, which becomes its receptacle, and the hay-loft by this means proves a ſource of contagion. In fact, no hay-loft, properly, ſhould ever be over a ſtable; neither ſhould corn be kept over it; they both imbibe ſalt acrid particles by this means, and this more particularly if it is not ceiled. Neither is it a wholeſome practice for ſervants to ſleep over a ſtable. As little hay or corn ſhould be kept, likewiſe, in the ſtable as poſſible; but as it is wanted it ſhould be brought to the horſes. Narrow ſtalls are very prejudicial to horſes: ſtrains in the back are often occaſioned by them; and whenever a ſtall is leſs than ſix feet, the groom ſhould have peremptory orders never to turn a horſe in that ſtall. Bars or bails are alſo objectionable, from the eaſe with which horſes may play with each other over them: they may likewiſe kick each other by this means. It is ſeldom that horſes eat alike in point of quickneſs: when they are ſeparated by bars only, the ſloweſt eater gets robbed of his food.

The acclivity of the generality of ſtalls is alſo a very ſerious objection to them, for they occaſion a horſe to have a falſe bearing: the greater weight is thrown on the heels, and the back ſinews are put on the ſtretch; and there is little reaſon to doubt that many of the lamenefſes of horſes are attributable to this cauſe. The ground ſhould be made even, or nearly ſo, with only a very ſlight ſlope. To remedy the inconvenience of the urine not flowing freely off, in many good ſtables, in the center of each ſtall, is a ſmall grating, covering a little well immediately under the horſe's belly, to receive the urine, and which is a very good practice; but it has its diſadvantages, the principal of which is, that it is not ſo well adapted to mares; and, as ſuch, a ſlight ſlope in the ſtall, with a grating at its bottom, or a gutter, is the preferable and moſt convenient plan. Whenever theſe gratings communicate with one common ceſſpool, it ſhould be very frequently emptied, and it ſhould likewiſe be covered up, or it encourages a draught of cold air under the horſes.

There is much contrariety of opinion relative to the propriety of permitting horſes to ſtand during the day on litter. There are cogent arguments for and againſt it. Litter entices horſes to lie down during the day, which, if they are in conſtant ſevere work, is certainly deſirable. Litter, likewiſe, when the ſtable is paved roughly, prevents the unevenneſs of the

ſtones preſſing on the feet.----On the other hand, horſes are very apt to eat the litter, and which proves unwholeſome. It is likewiſe apt to retain the urine, whoſe acrid ſalts, aſcending, impregnate the air, and ſtimulate the eyes. The conſtantly ſtanding on the litter makes many horſes' legs ſwell, which is proved by removing it, when they immediately return to their proper ſize. Horſes ſtanding conſtantly on the litter appear to feel the difference of the road, and hence are more liable to be tender footed: the warmth and moiſture retained, likewiſe, are very apt to occaſion cracks and ſwelled legs. Thoſe who are advocates for litter under horſes during the day, ſhould be very careful to have it changed as often as it is either ſoiled or wet, for wet litter is one of the ſtrongeſt cauſes of blindneſs.

A horſe ſhould always be brought into a ſtable with his ſkin nearly of the temperature of that ſtable. It is not generally known, though certainly the caſe, that paſſing from a cold atmoſphere into a warm one will give cold, with almoſt as much certainty as from a warm into a cold ſituation. But if a horſe is brought home very hot, he muſt not be hung by the bridle at the door till he gets cold; he ſhould be walked till he is cool, but not cold. The feet and legs, in dirty weather, ſhould be always waſhed, and carefully picked; after which, unleſs they are rubbed dry, it is better not to waſh them.

A cool ſtable, with a proper proportion of cloathing, is a great deſideratum in ſtable management, and, if more attended to, would leſſen the maladies theſe valuable animals are liable to.

STABLE MANAGEMENT.

This is a ſubject of conſiderable importance, and it is evident the limits of a work of this nature will not admit of all the detail that may be wiſhed; nevertheleſs the points moſt neceſſary will be touched on, and more may be learned on a reference to my larger publication, "Veterinary Outlines." The duties of a groom conſiſt in *feeding*, *dreſſing*, *exerciſing*, and *attending* to the feet of his horſes; in addition to which he has the care of the appointments, as *harneſs*, *ſaddles*, *bridles*, &c.; and in this order I ſhall juſt touch on theſe ſubjects.

FEEDING

Forms the moſt eſſential part in the care of horſes, and more error is committed on this head, from a want of a knowledge of the internal economy of the horſe, than is at firſt imagined. The horſe, as an animal intended for ſpeed, is furniſhed with a very ſmall ſtomach, but capacious inteſtines; he therefore ſhould be fed but a little at a time; and as we know that whenever the ſtomach is empty a great debility pervades the whole frame, and as a ſmall ſtomach muſt be frequently empty, ſo we ſhould fre-

quently feed our horſes, giving them but a little at a time. The general food of horſes is herbage green or dry, and grain, which is always dry. Green herbage is from all the various graſſes; the dry is commonly of clover and meadow hay; and, among ſaddle horſes, meadow hay is uſed by far the moſt frequent. Any kind of grain nouriſhes a horſe, but barley and oats are the moſt in uſe, and in South Britain oats are almoſt excluſively uſed. To horſes under common labour, from ſixteen to twenty pounds of ſound meadow hay, with from half a peck to three quarters of a peck of old full oats daily, will be fully ſufficient: ſhould froſt or other circumſtances prevent or leſſen their exerciſe to a very ſmall degree of exertion, then even the above quantity may be leſſened, and a ſmall proportion of bran ſubſtituted for ſome of the corn: on the other hand, when the exerciſe is very ſevere, it may be increaſed. But ſince corn and hay have become ſo extravagantly dear, many other ſubſtances have been ſubſtituted as food for ſaddle horſes, which were before but little uſed, or confined to draught horſes, as ſtraw, chaff, carrots, potatoes, &c. Some perſons, when hay is dear and corn cheap, ſubſtitute wheaten ſtraw for hay; other mix ſtraw with their hay. But by far the moſt economical mode for the owner, and the moſt nutritious for the horſe, is the uſe of chaff, which, when mixed with corn, is called manger feeding; and

whenever, as at preſent, corn is cheap and hay dear, this manger feeding will be found a moſt excellent mode of horſe keeping. The proportions of this manger food I find moſt convenient are, one part of hay, two parts of ſtraw, and one part of oats. Of this mixture three, four, five, or ſix pecks may be given daily, according to the ſize of the horſe and extent of his exertion. It will add very much to the nutriment this mixture affords, if the oats are previouſly bruiſed; and, in fact, it is much to be wiſhed that this practice was completely eſtabliſhed. It will likewiſe be peculiarly grateful to the horſe if half the quantity of hay ſhould be of the clover kind, of which horſes are very fond. On this food three horſes may be ſupported at as little expence as two horſes can in the uſual manner, and for the common purpoſes they are full as well nouriſhed. In the country, potatoes and corn may be mixed; or bran, with potatoes boiled and maſhed, forms an economical and nutritious food; and it will agree with all conſtitutions if a little bean meal is mixed with it. In this manger feeding, a pound or two of hay put into the rack night and morning is ſufficient, and even this is more to ſatisfy the prejudices of the groom than any neceſſity of the horſes. Carrots form an excellent food for horſes, particularly for purſive and thick-winded ones. On carrots, hay, and a ſmall quantity of bean meal, horſes may be ad-

vantageouſly kept in times when corn is dear and hay cheap,

In the ſpring, when horſes cannot be turned to graſs, it is peculiarly beneficial to ſoil them; that is, to allow them green food in the ſtable; but great care is neceſſary in giving it freſh every day, or at fartheſt each other day. It ſhould never likewiſe be put up in large quantities, which gives it a diſpoſition to ferment, and turn ſour.

WATERING

Of horſes is a part of their dieting that is not of trifling import. All horſes prefer ſoft water, and it is infinitely more wholeſome: ſo partial are they to it, that a muddy chalky pond is an irreſiſtible ſtimulus to every horſe. It is not a good cuſtom to warm water generally for horſes; but it is a much worſe cuſtom to give them water juſt from a pump or well; and this becomes more pernicious in ſummer, when well water is, comparatively, colder than in winter, and likewiſe when a horſe is heated by exerciſe. As ſome horſes drink quicker than others, it is more proper to give them their water in the ſtable than at a pond, where they often drink immoderately.

The quantity given ſhould be regulated by the exerciſe and other circumſtances. In ſummer, and when the exerciſe has been ſevere, more is neceſſary. In common caſes, a large horſe requires rather more than half a pail full, and that three times

a day. It is erroneous to ſuppoſe that abſtinence from water increaſes the wind or vigour. Horſes ſhould never be galloped after drinking---it is the common cauſe of broken wind; nor ſhould horſes have much water given before eating: but on a journey, when the animal is very dry, give two quarts; then feed; and when that is done, give the remainder of the quantity intended.

DRESSING, OR GROOMING.

There are three intentions anſwered by dreſſing horſes: it cleans them from duſt and dirt; it counteracts the artificial ſtate of long continued reſt and inactivity they are under by their confinement, which it does by exciting the circulation; and, laſtly, it gives a beauty and ſleekneſs to the coat. Grooms uſually conſider only the latter intention; and, as dreſſing requires much labour, they naturally reſort to ſuch means as produce a ſleek ſmooth coat without the exertion; and this, experience tells them, is beſt effected by hot ſtables; and it is idleneſs, in fact, has been the origin of this deviation from nature; but which, to give it a hold on the good opinion of their maſters, grooms aſſert is intended to add to the health and uſeful qualities of a horſe.

But nothing is ſo abſurd, nothing ſo unnatural, and nothing, but hard work, is productive of ſo many evils to this valuable claſs of animals as hot ſtables. Let the advocates for them live for a month (con-

fined as many hours out of the twenty-four as horſes are) in the dreſſing-room of a warm bath: they may become fine and delicate, but their vigour and durability will be loſt. Whenever, therefore, a fine coat is wanted, let it be gained by proper dreſſing. I ſhall not here deſcribe the mode uſed in dreſſing a horſe; it is ſufficiently known: but I muſt make collateral remarks. The dreſſing *in* the ſtable ſhould, if poſſible, be avoided, otherways the duſt gets among the hay and corn, falls on the other horſes, as well as ſpoils the appointments. The currycomb ſhould not be too ſharp: ſome horſes become vicious by the uſe of one too harſh. No violent correction ſhould be ſuffered, nor any unneceſſary tickling. The legs ſhould be rubbed by the groom on his knees, having a whiſk of ſtraw in both hands, and the leg between the two.

THE FEET

Muſt be always an object of particular attention, examining the ſhoes, and picking out the dirt and gravel from under them: waſhing the feet and legs, whenever it is practiſed, ſhould always be followed by rubbing them perfectly dry. Stopping the feet is ſeldom a good practice. For EXERCISE, ſee that article, page 83.

THE APPOINTMENTS OF THE HORSE.

In attending to theſe, ſome things are eſſential to the health of the horſe, others only to the appointments themſelves. Of the former kind, is airing

every thing belonging to the horſe thoroughly, and which is more eſſential than may be at firſt imagined. When a horſe comes in hot from a journey, his ſaddle muſt have abſorbed a large quantity of moiſture: without care, this muſt remain damp; and if put on in this ſtate the next day, will very frequently give cold:---the ſame often happens from the body-cloaths, and even from the girths. It is a very proper mode to wear a cloth under the ſaddle: this can more eaſily be dried, and never can get hard, with a little care. Horſe cloths are certainly neceſſary, as they keep the animals from draughts of air, and from the acceſs of duſt to their coats; but in this, as in the ſtables, grooms err in point of heat, for their horſes are almoſt always too much cloathed. In ſummer, a ſingle ſheet is fully ſufficient; and in winter, one woollen cloth alone is all that is requiſite. Neither hacks nor hunters ſhould have head cloaths; and breaſt cloaths, though ornamental, are ſomething more than uſeleſs, for they keep a part, while at reſt, warm, which, as ſoon as the horſe goes out, is the part that moſt meets the air, and is moſt expoſed.

STAG EVIL.

I ſhall waſte no more time on this fatal complaint than is neceſſary to make perſons acquainted with it when it happens. From long expoſure to cold, from a prick, or any wound made into a very tender part,

a horſe ſometimes becomes rather ſuddenly ſtiff in his limbs; his jaws by degrees become ſet, his ears pricked, his tail cocked, his eyes ſtare, with the haw partly over them, and he looks animated, but he can hardly move:---this is ſtag evil, of which not one horſe in a thouſand recovers; and, as ſuch, it is, perhaps, always better to relieve the ſuffering animal by putting him to death, than to prolong his miſery by fruitleſs efforts.

STAGGERS.

This diſeaſe is divided by farriers into ſleepy and mad.

In *ſleepy ſtaggers* a horſe is always dozing, and reſting his head in the manger; and, if waked from this ſtate, he ſoon relapſes into it again.

From this ſtate it ſometimes degenerates into a frantic ſtate, when it is called *mad ſtaggers:* at others, the horſe becomes more and more ſtupid, and at laſt ſinks.

Bleeding is the principal means of relief to be depended on. Four, five, or ſix quarts ſhould be taken away; after which a bliſter may be applied to the top of the head, and a ſeton or rowel put under the jaws: the horſe ſhould be back-raked, and an opening clyſter thrown up; after which a diuretic ball may be given, if practicable. In four or five hours the bleeding ſhould be repeated; and on the following

day, if the ſtupidity is only ſlightly decreaſed, it muſt be again had recourſe to, by which means a cure will commonly be obtained.

Mad ſtaggers. Very frequently the *ſleepy ſtaggers* degenerates, after a few days, into this; at other times mad ſtaggers comes on at once. In this diſeaſe the horſe is furiouſly delirious, ſo as to render it very dangerous to come near him. He ſhould be carefully ſecured; and, if poſſible, either ſlung, or kept on the ground. Five, ſix, ſeven, or even eight quarts of bood, according to his ſize, ſhould be taken away, and which, if neceſſary, in a few hours, ſhould be repeated; but the firſt bleeding gives the greateſt chance of recovery. If the horſe cannot ſafely be got at, plunge the fleam into the vein, and let it bleed without any attempt at ſtopping it: even fainting from the loſs of blood will be of no prejudice. If the horſe can be approached, a ſimilar treatment in other reſpects ſhould be purſued as in the former caſe.

STALING PROFUSE. See DIABETES.

STALING DIFFICULT. See GRAVEL.

STOMACHICS. See CORDIALS.

STRANGLES.

This diſeaſe conſiſts in an inflammation of the glands under the throat, which uſually attacks young horſes between four and five years old. Theſe glands commonly proceed to ſuppuration, and burſt; and during this proceſs the horſe is a little dull, has a cough, and a diſcharge from his noſtrils. Sometimes the diſeaſe is not ſo mild, but is attended with conſiderable fever and ſore throat, and with ſymptoms of ſtrangulation. In all caſes, if a horſe is fat and ſtrong, bleeding is proper before the tumour forms matter: but here, when the diſeaſe is violent, it is eſſentially neceſſary. The bowels ſhould likewiſe be opened by raking and clyſters, and the ſwelled glands poulticed, firſt cutting off the hair. If they ſeem to have a diſpoſition to go back without ſuppuration, ſuffer them ſo to do, as it will ſave the animal a painful diſeaſe, and no harm can ariſe from it. When the throat is ſo much affected as to prevent the animal ſwallowing, bliſter it, by cutting the hair cloſe, and rubbing the

Blistering Ointment [page 22] down the throat, and near the briſket. To allay the fever, the

Fever Powders [page 25] may be given. The horſe ſhould have his head cloathed, and be kept generally warm, with maſhes and warm water allowed; and in every reſpect he ſhould be treated as

a horſe in fever. When the glands have formed their matter, which is known by the increaſed ſwelling and ſoftneſs, open with a ſeton or common lancet, and gently preſs the matter out.

The horſe ſhould now be ſupported with picked hay, and malt maſhes, till the cure is completed.

STRAINS.

No affection is ſo much miſtaken as that called a ſtrain, nor any complaint ſo variouſly treated. This ariſes from two ſources: the one is, the conſidering the tendons, the frequent ſeat of ſtrains, as elaſtic ſubſtances, put too much on the ſtretch; and the other ariſes from not conſidering ſtrains as having two ſtages,---one compoſed of inflammation, and another of the debility left in the part from the effects of the inflammation, and of the violence. A ſtrain is an unnatural extenſion of an elaſtic part, and a rupture of an inelaſtic part: now the muſcles may be relaxed, but the tendons, perhaps, are ſeldom or ever extended; but more uſually their ſheaths have ſome of their connections, or perhaps ſome of their fibres, ruptured. The treatment is the ſame in either caſe; for inflammation always follows a ſtrain, and the part becomes hotter and larger than uſual; this muſt, therefore, be treated as other inflammations: the horſe ſhould be bled when it is violent; he ſhould be allowed perfect reſt, and his bowels opened.

The *Embrocation for Strains* [page 24] ſhould be conſtantly kept on the part, till its heat and ſwelling are reduced: when this is the caſe, exerciſe muſt be gradually made uſe of; and, if any lameneſs remains, the part muſt be conſidered as in the ſecond ſtate of ſtrains, and muſt be ſtrengthened. An excellent application for this purpoſe is the

LIQUID SWEATING BLISTER [page 23], rubbed well into the part night and morning, or the following:

Sal ammoniac, crude, one ounce.

Vinegar, one pint.

Should lameneſs ſtill remain, a regular bliſter may be applied; and if this alſo fails, firing is often uſeful, as it forms an artificial bandage to the part.

SUDORIFICS or SWEATS. See ALTERATIVES.

SURFEIT

Is what every body talks of, but what no one can exactly deſcribe; it is, ſomething like *a cold*, a convenient term for any diſeaſe of the ſkin that appears under no regular form, and has no aſſignable cauſe. What, however, is moſt generally underſtood by this name is a diſeaſe of the ſkin, appearing in ſmall tumours, or bumps, under the hair; frequently the effect of perſpiration ſuddenly checked, and as ſuddenly promoted. It is readily removed by the—

ALTERATIVE CONDITION POWDERS [page 25], and by the loſs of two or three quarts of blood.

THOROUGH PIN.

When the mucous reſervoirs that lubricate the hock joint, from great exertion become enlarged between its point and ply, ſo as to be ſeen on the inner and outer ſides, the enlargement is called a *thorough pin*. Like ſpavin, it ſeldom lames, unleſs very conſiderable; and, like that, when it does, the cure is ſeldom more than temporary. A mild bliſter may be tried, which, if it does not remove it, preſſure may be made uſe of by a bolſter on each ſide of the hock, directly over the ſwelling, faſtened on by means of a coarſe worſted ſtocking drawn over the hock.

THRUSH, RUNNING.

This diſeaſe conſiſts of a running of ſtinking matter from the cleft of the frog. In many horſes it proves very obſtinate of cure, and this is particularly the caſe in contracted feet; hence it is reaſonable to infer that this is one cauſe of thruſh: another appears to be the ſtanding in hot fermenting litter; and of this kind is that rotten thruſh that often attacks the hind feet, increaſing till it eats away the whole frog, making the foot hollow, and at laſt degenerating into canker. Common running thruſh is,

however, more frequent in the fore feet, becauſe thoſe hooſs are more liable to contraction; and when the diſcharge is ſmall, it ſeldom does much miſchief.

It often is an outlet to the conſtitution, and hence comes on and increaſes from high feeding and want of exerciſe. It has been ſaid to be brought on from the frog being raiſed by calkins, and paring, ſo as not to be preſſed on when the horſe is at reſt, but which preſſure it always enjoys in a ſtate of nature.

The cure muſt be attempted according to the cauſe producing it. In common running thruſh of the fore feet, apply the

Strong Paste for Grease [page 23], melted in a ſpoon, and poured in night and morning, till the running ceaſes. When contraction appears the cauſe, the hoof ſhould be pared, and kept moiſt, previous to ſtopping the diſcharge. When want of exerciſe, or full feeding, has brought it on, bleed, or give a doſe of phyſic, and give more regular exerciſe. In the rotten thruſh, affecting the feet behind, remove all moiſture from under the feet; let the hoofs be pared down, which are uſually high in theſe caſes; let the whole be waſhed in vinegar, or beer grounds, three or four days, during which time give a diuretic, and bran maſhes: after this, pour in the

Strong Paste for Grease, melted as directed with the paſte.

WIND, BROKEN.

If the appearances that uſually precede this complaint are attended to in the early ſtate, it may ſometimes be prevented, but never, I believe, is cured, when confirmed. Broken wind is often occaſioned by a ſevere cold remaining ſome time, or being improperly treated; or from a horſe being exerciſed violently during it: it is brought on by the fooliſh cuſtom of riding hard after taking water, or after a full meal. Horſes who feed groſsly, and eat their litter, become ſo. It is generally preceded by a purſiveneſs and cough, which is moſt troubleſome in the morning, and likewiſe after eating and drinking. Bleeding, moderately, muſt be the firſt means made uſe of; after which a doſe of mercurial phyſic ſhould be given; and, when this is ſet, a courſe of the

Cough Balls [page 20] ſhould be tried; but, ſhould they not ſucceed, recourſe may be had to the following:

Extract of hemlock, one dram.
Opium, tartar emetic, of each a dram.
Aniſated balſam of ſulphur, half an ounce.

Make into a ball. Give one every or every other morning.

When broken wind is become complete, the treatment may yet be ſo conducted as to be palliative. Little water ſhould be given; the hay and corn

ſhould be of the oldeſt and beſt quality, and given in moderate quantities frequently.

Mixed food, as bran, chaff, &c., ſhould not be given in this diſeaſe; but chopped carrots are often found ſerviceable. If a journey is to be attempted on a broken-winded horſe, any oily fluid poured down the throat will aſſiſt the breathing during that day.

WIND, THICK.

The foregoing treatment applies equally to thick wind; only here, if the complaint is not of long ſtanding, the addition of a bliſter to the throat is ſometimes of conſiderable ſervice. The

Liquid Blister [page 23] rubbed into the throat, half way down the neck, every morning and evening, for three or four days, will anſwer the end. Here, likewiſe, there is greater relief to be hoped from a courſe of the

Cough Balls [page 20] continued ſome time.

WINDGALLS.

Motion requires, in moſt inſtances, a fluid to take off the effects of friction: the friction of the bones is prevented by the joint oil, and that of the tendons by little bags containing a very ſlippery mucus. Now, as motion increaſes, ſo this mucus increaſes; and hence, in very hard-worked horſes, theſe bags

become very much enlarged in the neighbourhood of conſiderable tendons. It is theſe preternaturally enlarged mucous capſules that form what are termed *windgalls*, but which do not lame, unleſs they become ſo large as to preſs on any of the parts, and impede their functions; but they always ſhew the effect of conſiderable exertion, and hence evince the liability to future lameneſs. It has been recommended to open them, and in the hands of a ſkilful operator it might perhaps be attended with ſome ſucceſs; but the operation is hazardous, particularly in the hind legs, and ſtill more ſo in capſules about the hock. I would, in preference, recommend preſſure, with abſolute reſt for ſome time. A ſmall bolſter ſhould be ſo formed as exactly to apply over the windgall, without ſlipping from off it, and which ſhould be kept in its ſituation by means of a ſtrong worſted ſtocking ſewed around; but no very tight bandage ſhould be uſed. At the ſame time, this bandage and bolſter ſhould be kept conſtantly wet with the *Embrocation for Strains.* By theſe means, continued for a month or ſix weeks, the contents of the windgall, or ſac, will become abſorbed, and moderate exerciſe will keep them down; though, it muſt be remarked, they will be likely to return to their former ſize, on hard work.

A more quick mode of treatment is bliſtering them, and which is often attended with good effects,

eſpecially if followed by a run at graſs. But in caſes where neither the one nor the other of theſe plans can be purſued, from the horſe being frequently wanted, the windgalled limb may be conſtantly bathed, after the horſe returns from his work, with the

EMBROCATION for STRAINS [page 24], and then bandaged up with an elaſtic roller made of ſtrong flannel; by which means they will ſlowly amend, or, at all events, their increaſe will be prevented.

WORMS.

Worms produce a large belly, voracious appetite, hot fœtid breath, a frequent looking towards the ſides, and ſometimes a ſtriking of them with the hinder foot; but, more particularly, the horſe looks unthrifty, his hair ſtares, and is dry; and though his belly may be large and hard, the reſt of his carcaſs is lean. Bots are a ſhort round worm, and inhabit the ſtomach; and unleſs they exiſt in prodigious quantities, which is ſometimes the caſe, they do not often do ſo much miſchief as is ſuppoſed. There is a dark round worm, longer than bots, inhabiting the large inteſtines, and which are apt to do more miſchief; there is likewiſe, but leſs frequently, a long round worm ſimilar to thoſe found in children. Horſes are ſubject alſo, now and then, to the ſmall aſcarides, or thread-worm, which com-

monly confine themſelves to the rectum, or laſt gut, and occaſion an intolerable itching of the tail.

Worms are known to exiſt not only by the foregoing ſymptoms, but likewiſe by the preſence of a yellow matter at the anus, which horſes having worms are ſeldom without.

All worms are very difficult to deſtroy. Bots can hardly be killed, even out of the ſtomach. Salt has been ſaid to deſtroy them; or, rather, that horſes who have had ſalt now and then ſprinkled in their food have never been troubled with them. The mineral poiſons, as mercury, arſenic, &c., have been thought to kill them; but the effect is uncertain.

The other kinds are alſo nearly as difficult of removal; but here mechanical means may be employed to more advantage, that is, the juices of the inteſtines may be rendered unhealthy by a courſe of medicines, which looſening them from the ſurrounding mucus, they come away by purging the horſe. Bitters, ſimply as bitters, cannot deſtroy worms; for theſe animals live in the moſt acrid bitter we know,---the bile; but a courſe of aloes in ſmall quantities, as a dram a day, till purging is produced, has proved uſeful. But I have experienced the greateſt benefit from the

Worm Powder [page 25], followed up by a ſtrong doſe of mercurial phyſic. After this has ſet.

another half dozen, and a ſecond purge, ſhould be given. This treatment does not often fail of relief, particularly in the inteſtinal worms.

WOUNDS.

The wounds of abſceſſes, ulcers, &c., have been conſidered in their ſeveral places; but by wounds here, is meant accidental laceration. A wide gaping wound, made with a ſharp cutting inſtrument, ſhould be cloſed up with ſtitches, one to every inch of fleſh. Theſe ſtitches ſhould take in a portion of fleſh, as well as ſkin, to hold them together, and they ſhould not be too tight. Over this cloſed wound a double cloth, wet with a ſaturnine waſh, ſhould be placed; and if the wound is in a ſituation likely to be influenced by motion, a bandage muſt be carried over the whole. When matter appears, dreſs with any ſimple ointment, and keep the ſurface from the air, but do not bind it tightly up.

When a wound is much torn, or bruiſed, ſtitches are better avoided. In this caſe the part ſhould be well waſhed with warm water, if it is ſuſpected any dirt, or other extraneous ſubſtance, is within. Warm fomentations ſhould then be made uſe of for the firſt day or two, repeated every four or five hours, after which the part may be dreſſed with yellow baſi-

lieon; or it may be waſhed (inſtead of fomented) with the following:

Spirit of turpentine, half an ounce.

Tincture of myrrh, one ounce.

Opodeldoc, two ounces.

When this complicated wound runs good matter, dreſs with common ointment, guarding it from the air.

A

Concise Description

OF THE

MOST PREVALENT AND IMPORTANT

OF

THE DISEASES

OF

Dogs.

INTRODUCTION.

I BELIEVE I am the firſt perſon in this country, and, perhaps, in any other, who has paid any very direct and decided attention to the diſeaſes of dogs on ſcientific principles; and as this is now very generally known, ſome improvements are of courſe expected from me, and ſome publication on the ſubject naturally looked for. But it muſt be remembered, that as I am almoſt, if not wholly, original in my attention to this ſubject, ſo I labour under manifeſt diſadvantages; for I can derive no aſſiſtance from the labours of others, but have to trace out every part of the medical treatment ſtep by ſtep. Many experiments muſt be made, many ſubjects under diſeaſe attended to, and every variety of remedy tried, before any detailed publication on this ſubject can properly appear; but ſuch a work, I hope, ſome time hence, to be able to offer, in which I ſhall deſcribe the ſtructure, functions, and œconomy of theſe uſeful animals, and their natural and artificial treatment, with the beſt mode of cure to be adopted for their various complaints. But at preſent I muſt content myſelf with laying before the

public the outlines only of the improvements I have made, and a ſketch of the treatment I purſue in the more prevalent diſeaſes among them. And though, unaided as I am by any previous inſtruction, nothing perfect can be expected, yet it will be found that much has been done towards ameliorating the ſufferings of theſe faithful domeſtics, there being few of their diſeaſes I am not enabled to offer ſome curative inſtructions relative to, and as few that I cannot point out efficacious remedies for. Theſe remedies, ſome of them, I ſhall at preſent offer to the public ready compounded, as the only way of reimburſing myſelf for the expenſes I have been at; but the attendant treatment is at the ſame time detailed, and as I offer theſe remedies univerſally, and place them within every one's reach, ſo I ſtill think I do every thing that may prove uſeful, though I make no doubt I ſhall, by the envious and malicious, be taxed with empiricism. At a future time, when my experiments and attention have made ſtill farther improvements, as I have before hinted, I ſhall give a more detailed publication on this ſubject, in which I ſhall develope the whole treatment I purſue in every diſeaſe, and deſcribe at large every remedy I uſe.

But before I proceed farther, I muſt beg leave to ſay a few words relative to myſelf, in ſome meaſure as an apology to my friends and the public for my preſent purſuits.

Having been educated as a medical man, and by the liberality of my relations having been enabled to embrace all the advantages that an attendance on numerous lectures, and a conſiderable reſidence at one of the firſt hoſpitals in London could afford; and having afterwards practiſed with ſome ſucceſs as a ſurgeon, both privately and in the army, it greatly offended my relations, as well as ſurpriſed my friends and acquaintance, that I ſhould ſtoop, as they conſidered it, to ſtudy and practiſe on the diſeaſes of animals: but, above all, my attention to the diſeaſes of dogs has given offence to ſome, and occaſioned ſurpriſe in others. A ſurgeon is univerſally eſteemed a reſpectable character. A veterinarian is now above the vulgar. But a dog doctor is yet a complete ſtumbling-block. Alas! how long, how very long a time it requires to completely enlarge the human mind!---However, as I ſincerely wiſh to conciliate all, I would beg my relations and friends ſtill to conſider me as a ſurgeon, for I ſtill practiſe in my profeſſion when called on.* And thoſe who think I have relinquiſhed the higher title of veterinarian, I beg to inform, that my practice is at this moment extenſive among horſes, and that I am always willing to give

* I muſt in this place do myſelf the juſtice to ſtate, that on the diſeaſes ariſing from worms in the human body, and on rheumatiſm, my practice is very extenſive; I having made on thoſe diſeaſes two of the greateſt diſcoveries, I conceive, that medicine has lately witneſſed.

advice and aſſiſtance in every caſe of veterinary practice I may be conſulted upon. But, at the ſame time, I muſt beg leave to remark, that ſo extremely fond am I of dogs, and ſo unconquerably attached to them, that a much more opprobrious term than that of *Dog Doctor* would not compel me to relinquiſh my attention to them; in which reſolution, I have the ſatisfaction of ſtating, I am ſupported by the advice of ſome of the moſt eminent profeſſional men, and by the countenance of ſome of the moſt diſtinguiſhed characters for rank and fortune.

An enlarged way of reaſoning is a long time in becoming general, even among a civilized and enlightened people. Till the eſtabliſhment of the Veterinary College, and the practice of the veterinary art by men of education and reſpectability, farriery was deemed a low and ſervile purſuit; but at preſent, by a retrograde ſtep towards enlarged reaſoning, it has become ranked among the liberal arts: for, though its practice is of ſufficient importance to ennoble its practitioners, it was not till the ſituation, manners, and character of ſome of theſe practitioners had conferred a portion of dignity on the ſubject itſelf, that it was even creditable to ſeem to underſtand it.

Preciſely as farriery or veterinary medicine then was ſituated, a curative practice on the diſeaſes of dogs now ſtands. A perſon practiſing on theſe animals has hitherto been conſidered as following a very

mean purſuit; and the very term of dog doctor conveys an idea remote from gentility: but it is not the unworthineſs of the purſuit, but the kind of perſons who have hitherto followed it, that has made it ſo. I believe no one will diſpute the value of dogs: common humanity dictates the neceſſity of alleviating their diſtreſſes; and their faithful attachment to mankind claims not only the exertion of our humanity, but the full efforts of our gratitude and affection. And though, in real utility, they are ſubordinate to the horſe, they are, in many points, more eſſential to our immediate comfort; and are certainly, by their domeſtic habits, connected to us by much more winning ties.

If, then, they are ſo valuable, and if it is our duty to attend as well to their ſick as their healthy moments (which it undoubtedly is, for it is the life of art we have ſubjected them to that has entailed diſeaſe upon them), ſurely thoſe who improve this branch of the healing art deſerve attention, and not reprobation. But, in the firſt inſtance, it muſt, in this as in farriery, be the reſpectability of the practitioner that muſt reſcue the purſuit from ignominy; and afterwards, as the ideas of mankind become more liberal and extended, and the public eye opens on the neceſſity and utility of the ſubject, the art will then not only bear itſelf up, but even add reſpectability to its practitioners. In every country the

practice of medicine, in all its branches, has been eſteemed a liberal and noble purſuit; and it has always been deemed neceſſary that its profeſſors ſhould poſſeſs refined manners and extenſive education. The ſtudy of medicine embraces a great variety of ſubjects, and is neceſſarily divided into a great number of parts; and as greater individual improvements can be made by devoting the attention to one of theſe parts than to the whole, ſo it has given riſe to the various medical occupations of phyſician, ſurgeon, apothecary, midwife, veterinarian, &c. Animals are healed by the ſame means as ourſelves; hence their treatment is only a branch of the healing art: and though, for the above reaſons, this branch is uſually purſued alone, yet it is equally a part of a great and noble whole, which, as its attainment muſt be accompliſhed by the ſame means, ſo it ſhould be purſued by ſimilar perſons, namely, thoſe of education and refinement.

If, therefore, dogs, as being faithful, deſerve our gratitude; if, as being generous and brave, they merit our protection; and if, as being uſeful, they call for our utmoſt care; it is evident, that whatever developes the means of preſerving them in health and curing their diſeaſes; whatever tends to improve their condition, and make them more ſubſervient to our uſe, muſt be a uſeful, and even a noble purſuit: for it has for its object (that which only truly ennobles

any one)---univerſal philanthropy, and general utility.

I have, from my attention to this ſubject, been taxed with a want of common and proper pride. I believe it might not be difficult to prove that this very pride would be a ſufficient motive, independent of a ſtrong affection for the animal in queſtion, to ſtimulate ſome perſons to the purſuit; for in human medicine there are ſo many ingenious practitioners, that there is little chance of riſing to ſuperior eminence: in the attention, likewiſe, to the diſeaſes of horſes, an individual has alſo too many cotemporaries to be able greatly to ſignalize himſelf; but the diſeaſes of dogs offer an unbeaten track: and here the practitioner may ſtart alone and unrivalled, and for ſome time, at leaſt, is likely to reap his honours and emoluments undiſturbed. And, for myſelf, I muſt own, that I think it more ſatisfactory to ſtand firſt in a ſubordinate purſuit, than unnoticed in a ſuperior one.

DISEASES OF DOGS.

DOGS are much more nearly allied to ourſelves in conſtitution than either horſes, oxen, or ſheep; hence their diſeaſes are more like our own; and living, as they do with us, a life of art, their diſeaſes become not only very numerous, but very mixed and irregular. This places their medical treatment without the reach of the common farrier; and even the veterinarian, who follows analogy only, without a particular attention to the ſtructure, œconomy, habits, and manners of the dog, will find himſelf totally at a loſs in the ſame; and though the ſimilarity of their conſtitutions, from their eating, like us, mixed food, and being immediately domeſticated with us, gives their diſeaſes a reſemblance to our own, yet the great difference in their mode of expreſſing theſe diſeaſes, and the peculiar effect that ſome medicines have on them, render the human ſurgeon, without a decided attention to the ſubject, perfectly incapable of acting from analogy: independant of which, dogs have ſeveral ſpecific diſeaſes equally unknown to horſes, or ourſelves.

Without a very ſtrict and very extended attention to the ſubject, no one would be aware how very numerous are the diſeaſes of theſe animals. Rheumatiſm, both chronic and acute, is very common among them. I have ſeen an affection producing chalk-ſtones in the joints of the toes, not unlike human gout. Pleuriſy deſtroys many of them; and inflammations of the ſtomach, bowels, and kidneys, are not unfrequent. They are ſubject likewiſe to conſumptions, and are not free from the whole train of nervous affections, as apoplexy, lethargy, ſpaſm, palſy, epilepſy, &c. Diſtemper, worms, and mange, are too well known to need comment.

The diſtinguiſhing the diſeaſes of dogs, and the proper mode of treatment, are not the only difficulties to be overcome; but how to adminiſter the remedy, when the others are evident, is often a very ſerious difficulty. Now and then, dogs prove very refractory; but, in the greater number of caſes, medicines may be eaſily given to them; but to a large dog, not leſs than three perſons are often requiſite. In general caſes, however, two perſons can manage it readily in the following manner: Place the dog upright on his hind legs between the knees of a ſeated perſon, with his back towards the perſon; then apply a napkin around his neck and ſhoulders behind, bringing it over his fore legs, and ſecuring it by the knees of the perſon holding the

dog; by this means his fore legs cannot act againſt the medicine. The jaws being now opened by the perſon between whoſe knees he is, a ſecond attendant now holds the tongue down with one hand, and with the other places the medicine on the root of the tongue; when his mouth being cloſed, and kept ſo by the hands, it is of neceſſity ſwallowed. Nutriment may be given in a ſimilar manner.

Dogs in ſickneſs muſt be attended to with the ſame care that a child requires: whatever is worth doing at all, is worth doing well; and if dogs deſerve any attention, they muſt deſerve good attention, and humanity demands that our utmoſt exertions ſhould be beſtowed to relieve them; and if in a ſtate of health they are allowed to come near the fire, to ſleep warm, to be careſſed, and to eat good food,---in ſickneſs they require ſtill more: and when, merely to avoid trouble, they are in this caſe confined in a cold room, or outhouſe, attended by a neglectful ſervant, without ſolace, and with cold food and water alone, neither can we expect their recovery, or anſwer to our own minds their deaths. Dogs are very irritable; and though it may ſeem an affectation of tenderneſs, it is yet a very neceſſary caution, that when they are ill, their minds ſhould be ſoothed by every means in our power, or their complaint, in many inſtances, will be greatly aggravated. I have ſeen a ſick dog fall into convul-

ſions at the momentary ſight of a dead one; and I have many times witneſſed an angry word ſpoken to a healthy dog have the above effect on a ſick one, who was near. Joy and ſurpriſe will produce the ſame. A dog, under my care, who was rapidly recovering from a lingering illneſs, was viſited by a ſervant, of whom the animal was particularly fond: on ſeeing this ſervant, he at once fell into convulſions, and never afterwards recovered from them; and this I have ſeen frequently happen. So great is the gratitude and attachment of theſe animals, and ſo feelingly alive are they to kindneſs, that even in death they are not unmindful of their benefactors. A large ſetter, who, after being tenderly nurſed in diſtemper for three weeks, had lain on a bed for three days in a dying ſituation, without the ability to riſe;---a lady, who had been very attentive to him, on entering the room after a ſhort abſence, obſerved him fix his eyes attentively on her, and make an effort to crawl acroſs the bed towards her: this he accompliſhed, evidently for the ſole purpoſe of licking her hands; which having done, he expired without a groan. I am as convinced that the animal was ſenſible of his approaching diſſolution, and that this was a laſt forcible effort to expreſs his gratitude for the care taken of him, as I am of my own exiſtence; and had I never witneſſed but this proof of excellence alone, I ſhould think a

life devoted to the amelioration of their ſituation far too little for their deſerts.

Being engaged on a ſubject, in which I profeſs myſelf an enthuſiaſt, I beg to be indulged in one more ſtory, to which, though I was not, as in the above inſtance, a witneſs, yet, from the authority on which I received it, I can venture to anſwer for its authenticity. In the pariſh of St. Olave, Tooley-ſtreet, Borough, the church-yard is wholly detached from the church, and ſurrounded with high buildings, ſo as to be wholly inacceſſible but by one large cloſed gate.

A poor tailor, in this pariſh, dying, left a ſmall cur-dog inconſolable for his loſs. The little animal would not leave the dead body, not even for food; and whatever he ate was forced to be placed in the ſame room with the corpſe. When the body was removed for burial, this faithful attendant followed the coffin. After the funeral, he was hunted out of the church-yard by the ſexton, who, on going to ring the morning bell the next day, again found the animal, who had made his way by ſome unaccountable means into the church-yard, and had dug himſelf a bed on the grave of his maſter: again he was hunted out, and again found in the ſame ſituation the following day. The miniſter of the pariſh now hearing of the circumſtance, had him caught, taken home, and fed; and by every means endeavoured

to win his affections: but they were wedded to his late maſter; and, in conſequence, he took the firſt opportunity to eſcape, and regain his lonely ſituation. With true benevolence, the worthy clergyman permitted him to follow the bent of his inclinations; but, to ſoften the rigour of his fate, he built him on the grave a ſmall kennel, which was repleniſhed once a day with food and water. Two years did this example of fidelity paſs in this manner, when death put an end to his griefs; and the extended philanthropy of the good clergyman allowed his remains an aſylum with his beloved maſter.

Warmth is always congenial to the feelings of dogs; but in ſickneſs it is even more neceſſary than freſh air: their diſeaſes are very apt to end in convulſions, if they are not kept warm.

Liberal feeding is eſſentially neceſſary in moſt diſeaſes to which dogs are liable: living, like ourſelves, a life of art, their complaints are moſt of them thoſe of weakneſs; that is, under diſeaſe, they ſeldom can bear to be much lowered: there are caſes, however, as active inflammation, where a cooling plan only can be proper. When dogs are very weak, their ſtomachs cannot digeſt meat, even if they willingly eat it: but in theſe caſes they receive more nutriment from broth, jelly, &c., but moſt of all from gruel; for broth often purges, but gruel never. They muſt be enticed to eat likewiſe by the ſame

little arts we uſe to perſuade ſick children to take nouriſhment; for they are, under theſe circumſtances, to the full as ſickle, and as fanciful. A ſteak very nicely dreſſed will entice them frequently; and pork, in many caſes, when no other meat will. Broiled or roaſted meat is always taken in preference to boiled, and is more nutritive. Game bones will often be taken even by ſporting dogs, when every thing beſide is refuſed. But in all caſes of ſickneſs, when a dog obſtinately refuſes to eat, he muſt be forced; and the beſt food for this purpoſe is thick oatmeal gruel, poured down by means of a butter-boat. In caſes requiring cordials, ale may be mixed with the gruel, or even wine in ſome inſtances, as in putrid diſeaſes.

Cleanlineſs is not only eſſential to the health, but to the comfort of dogs, and in ſickneſs is refreſhing to them.

Not only are dogs improperly treated in ſickneſs, but the means of preſerving them in health are not ſufficiently attended to. The want of *exerciſe* is a great cauſe of diſeaſe among dogs: by this means they become mangy, get obſtinate coughs, canker in the ears, and cancerous ſwellings, or they become abſolutely choaked with fat. The not permitting the females to *breed* is in them a fruitful ſource of diſeaſe:—cancers along the line of the teats originate from this; obeſity, foul coats, and cankers in the ear, likewiſe are brought on by this neglect. *Vo-*

miting is a natural act in dogs, and they purpoſely excite it in themſelves by eating dog-graſs; but where they are confined, as in great cities, from the want of this natural cleanſer, they fall into diſeaſe. An artificial vomit, therefore, is very proper to be given now and then, and will greatly tend to prevent diſeaſe. This ſubject may be ſeen treated on more at length under the article EMETICS.

Coſtiveneſs is a great cauſe of diſeaſe in dogs: all animals living on fleſh require very active exerciſe to carry off the contents of the bowels; when, therefore, dogs cannot be regularly exerciſed, they ſhould have ſome vegetable food; or, if this cannot be given, they ſhould now and then have an artificial purge. See the article PHYSIC.

ALTERATIVES.

Dogs are very ſubject to diſeaſes of the ſkin from too full feeding, want of exerciſe, &c.; in which caſes *alteratives* are very uſeful. Some dogs, as thoſe of light colour with wiry hair, are ſubject to redneſs and itching of the ſkin at all times, which, if not prevented, degenerates into mange. A courſe of alterative medicines, in theſe caſes, now and then, will keep theſe dogs in health, and prevent this itching and redneſs of the ſkin from becoming more troubleſome. In ſpring and fall moſt dogs are more or leſs affected in their hides; and at this time alter-

atives are of great ſervice, and frequently prevent the attack of worſe complaints.

Many ſubſtances are uſed as alteratives: the compound I uſe, I have, from experience, found to be a very excellent one; and I can recommend it ſtrongly to the notice of others. It has a place among my ready prepared medicines, where it is called

MANGE ALTERATIVE POWDER [page 27].

CANCER.

A cancerous ſtate of various parts of the body, but particularly of the teats in bitches, is very common; and uſually, in them, is brought on by not permitting their breeding. The moſt effectual cure is to extirpate them; but it ſhould be done by a very ſkilful hand.

CANKER within the EAR.

An effuſion of blood, or matter, within the ear, called *canker*, is a very common complaint among dogs, which frequently ends in total deafneſs. The WASH for CANKER in the EAR [page 28] is a medicine that I never yet found to fail in the cure of this troubleſome complaint; but before I tried this application, all others proved very temporary in their relief.

CANKER on the Outſide of the EAR.

This, though it bears the ſame name, is by no means a ſimilar complaint to the former, nor is it ſo common. It is an ill-diſpoſed ulcer on ſome part of the flaps of the ear, very commonly on its edge; though I have at this time, in my Infirmary, a caſe where it exiſts on the outer ſurface of both ears. It proves very difficult of cure, and, unleſs ſtopped, it ſometimes ſpreads ſo as to deſtroy the whole ear. When it affects the edge of the ear only, it may, after ſcraping the whole of the ſcab away, be touched with lunar cauſtic. Should it, after this, break out again, the beſt mode of cure is to cut off the affected part. When it exiſts on the outer or inner ſurface of the ear, the treatment is not ſo eaſy; but here, likewiſe, ſomething muſt be applied that will raiſe an active inflammation, as the following:

Oil of vitriol, one dram.
Lard, four drams.

Mix, and apply a little over the whole ſurface of the ſore, and then cover the head up, and watch the dog, that he does not tear off the covering, or rub it into his eyes.

CONDITION.

The *condition* of dogs is a point of much importance to ſportſmen: like horſes, unleſs they are in good condition, they cannot hunt. *Condition* con-

ſiſts principally of two eſſential circumſtances: the having all ſuperfluous fat removed, ſo as to have the wind clear; and the being free from all foulneſſes, ſo as that the ſcent may be perfect, which it never is in a dog with a foul ſkin.

Condition is promoted in dogs as in horſes, naturally, by exerciſe, and by food that contains the greateſt quantity of nutriment in a given bulk, which muſt evidently be fleſh: artificial condition is promoted by alteratives and phyſic. When dogs are wiſhed to be got into high condition, the following will be found an excellent plan to purſue. Begin by giving one doſe of

Purging Balls [page 29]. When this has worked off, give, according to the directions, half a dozen of the

Alterative Powders [page 27]. When theſe are done with, give another doſe of phyſic, which may be followed by another half dozen of Alterative Powders, and a third doſe of phyſic, giving during the whole time, except on the days the phyſic is taken, regular hunting exerciſe. When the exerciſe is regular and active, fleſh is the beſt food for promoting hunting condition; for it not only gives vigour and durability, but it promotes a ſanguinary diſpoſition in the purſuit of the game: but the fleſh ſhould always be ſweet.

COUGH.

A cough is a common complaint among dogs. It is almoſt a conſtant attendant on diſtemper, and it is alſo frequent on taking cold: but there is a cough diſtinct from theſe, that attacks dogs as they grow old, particularly thoſe who are highly fed, have had little exerciſe, and have grown too fat. It reſembles, in a very ſlight degree, the human aſthma, and is known to ſome ſportſmen by the name of *huſk*: among others, this term ſignifies the cough that accompanies diſtemper. In many caſes there appears an enlargement of ſome of the contents of the cheſt, as of the heart or lungs; in others, diſſection ſhews nothing.

When it firſt appears, I have ſeldom failed to cure it by bliſters to the throat and cheſt, united with proper alteratives: ſlight doſes of emetic tartar are uſeful, and ſometimes opium and emetic tartar combined will remove it; but when it has been ſome time confirmed, it is more difficult to remove: however, by great attention, even in this ſtate, it has been relieved.

DISTEMPER.

For information on this head, I would refer the enquirer to the *Treatiſe on the Diſtemper* [price 1s.], which little work has paſſed through two editions within two years. The treatment and cure of this

fatal diſeaſe are there detailed at length. It may be purchaſed at any reſpectable medicine venders, as well as the *Medicinal Powders* [page 26] for this complaint, whoſe rapidly increaſing ſale is a ſufficient teſtimony of their efficacy. Had the whole deſcription of Diſtemper been introduced here, it would have ſwelled this little work to a voluminous ſize.

EMETICS.

Vomiting is ſo often repeated in all dogs, and with ſo little difficulty, that we are warranted in concluding it is in them a natural and a ſalutary act, tending to keep them in health. They are themſelves ſo ſenſible of this, that they purpoſely excite it by eating a ſpecies of broad-leafed graſs, which proves a vomit to them. Now, if vomiting is neceſſary to dogs living in the country, where they have freſh air, and plenty of exerciſe, how much more ſo muſt it be to dogs in places like London, or other great cities, where they are pampered, highly fed, and get little exerciſe? Yet, in theſe caſes, they very ſeldom can get at this natural emetic; for, even if they walk, the highly cultivated fields around large cities ſeldom produce this graſs, and without it they ſeldom vomit. I have no doubt, myſelf, that many of the diſeaſes to which dogs are ſubject are brought on by the want of this natural act; for their ſtomachs become over-loaded, and too much is taken into the

conſtitution, which either produces fat, or ends in mange. Naturally, when dogs have eaten more than is proper for them, they have recourſe to this graſs, by which their ſtomachs are ſoon relieved; but in cities and large towns, where they are confined from this means of relief, the accumulated contents of the ſtomach, after diſtreſſing that organ ſome hours, paſs into the inteſtines, where the weight adds ſtill greater diſtreſs, producing ſometimes coſtiveneſs, and not unfrequently cholic.

Being perfectly convinced of theſe circumſtances, I have long been in the habit of recommending for dogs thus ſituated, once or twice a week, an artificial vomit: and where it has been regularly perſiſted in, it has been attended with the moſt beneficial effects. Dogs beginning to get purſive, and fat, have been kept by this means in moderate caſe; and the early ſtate of diſeaſed cheſt, producing ſhort breath and conſtant cough, has been removed. That conſtant ſickneſs, likewiſe, united with cough, in which a dog, after ſome violent efforts, brings up froth alone, has been done away by a regular emetic now and then.

In ſituations capable of it, dog-graſs may be ſet in pots, if not near gravel walks; but it muſt every year be re-ſown, or ſet, or its qualities alter. Where this cannot be done, a grain or half a grain of eme-

tic tartar, given every now and then, produces effects ſimilar, and nearly as beneficial.

FITS.

Fits in dogs, though not very different in appearance from each other, ariſe from very different cauſes, and, therefore, require very different treatment. The fits that attack apparently healthy dogs of all ages are commonly ariſing from either coſtiveneſs or worms. In countries where there are lead mines, dogs have violent fits from the effects of the lead on the water; in which dreadful diſeaſe the oxen, ſheep, goats, and horſes, participate. Mercury forms the beſt antidote, either rubbed externally, or given internally. In the treatment of fits, it is evident the cauſe producing them muſt be removed to effect a cure. The immediate fit itſelf may be removed at the time, by plunging the dog into cold water. Whenever a fit has happened to a healthy dog, he ſhould immediately have a briſk purge given him, for fits are very frequently brought on by ſimple coſtiveneſs; and even if this was not the caſe, previous to the fit, this treatment would be the moſt proper. If it becomes really aſcertained that coſtiveneſs was not the cauſe, the ſubſequent treatment muſt be different: ſhould it be at all ſuſpected the affection aroſe from worms, treat as directed under that head. Some dogs are ſo irritable, that whatever

raiſes any ſtrong paſſion in their mind produces fits; hence dogs much confined, on being ſuffered to run out, frequently have a fit. It is this irritability in the mind likewiſe that produces fits in pointers and ſetters when hunting, for they are more frequent in the high-bred and eager than in the cool coarſe dog. In the firſt inſtance, more frequent exerciſe ſhould be allowed; and in this latter inſtance of ſporting dogs, the conſtitution ſhould as much as poſſible be ſtrengthened, for fits are here the effect of too much energy of the mind beyond the powers of the body, and in all caſes they are the effect of a peculiar debility. The irritability of the mind muſt alſo be leſſened, and which is beſt done by habituating the dog to the ſight of game, thereby deſtroying his eagerneſs. In a very valuable dog belonging to a gentleman in Kent, affected with fits whenever he hunted, I recommended a removal into a country more plentifully ſupplied with game than his neighbourhood: the conſequence of which was, that though for a few days after his removal he had more frequent fits than ever, yet they gradually leſſened, and at length wholly left him. Some dogs, however, who exerciſe much, have fits merely from the repletion of the veſſels of the head: in this caſe, bleeding, and a ſeton worn ſome time in the neck, prove uſeful; and whenever fits have been habitual, a ſeton ſhould be applied. Fear in irritable dogs produces fits; and

it was but the day preceding the writing of this article, that I ſaw a Newfoundland puppy, from being moved to a new ſituation among other dogs, immediately fall into a fit from fear, from which he never recovered, though before only ſlightly indiſpoſed. Teething in puppies will ſometimes produce fits; but thoſe ſportſmen who are aware of this, frequently fall into an extreme, and conſider all the fits of puppies as originating from this cauſe, when by far the greater number of theſe caſes are the effect of worms.

The fits that are the conſequence of diſtemper may be uſually diſcovered by the other attendant ſymptoms: ſometimes however fits are the firſt ſymptoms, in which caſe the dog may recover; but when fits come on ſome time after diſtemper has made its appearance, the animal ſeldom recovers. The fits accompanying diſtemper are more frequent in winter than in ſummer, which ſhews that warmth is one of the beſt preventives againſt theſe fits. The moſt frequent kind of fit that accompanies diſtemper is a quick champing of the mouth, with a ſhaking of the head, a diſtortion of the countenance, and a flow of frothy ſaliva from the jaws: as the diſeaſe advances, theſe fits increaſe, and become more violent. Another form in which fits make their appearance in this diſeaſe is by running round, and other violent contortions of the whole body. In other inſtances there is univerſal and continued ſpaſm of the whole body,

which has no ſuſpending intervals: all theſe are ſometimes blended, or degenerate into each other.

In the habitual fits of dogs, giving them, every third, fourth, or fifth day, according to the effect produced, one of the

ALTERATIVE MANGE POWDERS [page 27], proves commonly a ſalutary and efficacious mode of treatment.

When fits appear whoſe cauſe is more obſcure, it would be prudent to ſtate the caſe accurately to the author, who might judge thereon, and direct a proper mode of treatment.

HUSK. See COUGH.

INFLAMED LUNGS.

Dogs not unfrequently are attacked with this complaint from ſhearing or clipping, or other expoſure to cold. It may be diſtinguiſhed by the extreme coldneſs of the paws, moiſture from the noſe, elevated head, and difficult breathing. The cure muſt be attempted by bleeding largely, bliſtering the cheſt, and opening the body by a briſk purge.

INFLAMED STOMACH.

This is likewiſe not an unuſual complaint among dogs, and is characterized by inceſſant ſickneſs, with exceſſive thirſt; the anxiety of the countenance is

great, and there are evident marks of great diſtreſs. I believe it ſeldom admits of cure in dogs: the attempt may be made by bleeding, and bathing in warm water.

INFLAMED BOWELS.

This produces ſimilar ſymptoms to the above; but the diſtreſs is not ſo great. I have ſeen ſeveral dogs under this complaint who have appeared tolerably lively, and even not refuſed their food till within a very ſhort time of death. The inceſſant thirſt and vomiting in this is the ſame as in the former, only the ſickneſs is not ſo immediate on taking any thing as in inflamed ſtomach. The cure muſt be attempted, as in inflamed lungs, by bleeding and bliſtering, united in this caſe with warm bathing.

LOOSENESS or PURGING.

Looſeneſs among dogs is not an unuſual complaint, and has various cauſes and origins, according to which it muſt be treated. Two of the moſt general cauſes of purging among dogs are, *Diſtemper* and *Worms*. The purging which accompanies *Diſtemper* is very obſtinate to remove, and when it comes on at the cloſe of the complaint is generally a very fatal ſymptom. Sometimes it comes on with the firſt attack of the diſeaſe, in which caſe the Diſtemper

Powder alone will frequently remove it; but in the other caſe of its coming on later in the complaint, other means are neceſſary, as giving boiled ſtarch, or chalk and opium, as is detailed in the Treatiſe on that ſubject, and in the directions accompanying the Diſtemper Medicines. The ſtools, in the purging produced by diſtemper, are commonly particularly black, and which alone is a conſiderable and diſtinguiſhing mark in the complaint.

The purging brought on by *Worms* has a different appearance, being uſually not ſo dark, but remarkable for the ſtools always being mixed with ſlime and mucus, and very frothy. This ſpecies of looſeneſs ſhould be treated as directed under the head WORMS.

The looſeneſs to which young puppies are ſubject is beſt checked by boiling milk with ſugar a conſiderable time: ſtarch boiled, and given thick, is a very excellent means of ſtopping purging in all dogs, and rice the ſame. Prepared chalk, with a few drops of laudanum, is a proper medicine in theſe caſes; and ſometimes a ſlight vomit of ipecacuanha will have a ſalutary effect.

MADNESS.

This dreadful complaint is frequently confounded with diſtemper, to the terror of many perſons; and in many caſes it really requires the judgment of the experienced to decide between them. I have, in the

Treatiſe on Diſtemper, endeavoured to lay down ſuch exact directions for the mode of diſtinguiſhing theſe two affections from each other, that I think will enable any perſon, having recourſe to it, to decide in a moment between them. Since diſtemper has been ſo prevalent, madneſs is much leſs frequently ſeen; but as it is generated within this genus of quadrupeds, and only to be caught by all others, ſo there is reaſon to fear it will never be wholly exterminated.

PHYSIC.

On many occaſions, purging medicines are very proper and uſeful to dogs. In ſickneſs, by purging we frequently reſtore health; and in health, by the ſame means we often enſure its continuance. Coſtiveneſs is very prevalent among dogs, particularly thoſe who have little exerciſe, and are fed wholly on fleſh: this complaint frequently occaſions piles, and likewiſe not unfrequently degenerates into abſolute and obſtinate conſtipation; and numerous are the dogs I have ſeen deſtroyed by this means. In theſe caſes, a proper purgative now and then is highly proper. The diſpoſition to fatneſs ſome dogs ſhew, and which certainly ends in diſeaſe, is kept down by proper phyſic. Fits are frequently ariſing from a coſtive habit, and the want of proper phyſic. Worms are removed by purgatives frequently. With-

out phyſic, dogs cannot readily be got into hunting condition: when it is of a proper kind, it increaſes their wind, vigour, and durability. In the firſt ſtages of diſtemper, purging is particularly ſalutary, and ſhould always be encouraged by proper opening medicines.

Dogs ſhould be very carefully purged: they do not bear ſtrong phyſic; and I have ſeen very fatal effects from adminiſtering them too ſtrong, particularly of the mercurial kind. It is not ſafe to give a young ſmall dog more of any ſubſtance than would purge a child; and a large full grown dog will ſeldom bear more than a hearty man.

The *phyſic* I generally make uſe of for all the aforementioned purpoſes, and which anſwers theſe purpoſes with ſafety and efficacy, may be ſeen under the title

Purging Balls [page 29]. It is ſo compounded, as to have regulated doſes in each package, adapted to the various ſizes, ages, and ſtrengths of dogs.

WASHING OF DOGS.

This is a very ſalutary and uſeful practice; nevertheleſs from conducting the proceſs injudiciouſly much miſchief is ſometimes occaſioned. Dogs ſhould be carefully rubbed dry after they have been waſhed. I have known it in many inſtances, when this has been

neglected, to produce fatal colds, cholics, &c. Large dogs, when washed, may be permitted to run into the stable among clean straw, and which is a very excellent means of drying them, and, from its warmth, a very safe one. It should be remembered, in ascertaining the proper warmth of the water for washing dogs, that the heat that appears trifling to the hand of a servant always used to dabbling in suds, will scald an animal subjected to no unusual heat. Pearl ashes in moderate quantity mixed with the water are more proper than soap to wash them with, particularly when the skin is foul, and itches. Soap is made from fat and an alkali; consequently, if more fat becomes attempted to be mixed with soap, it cannot dissolve it: therefore, as there is much grease or unctuous matter on a dog's hide, so soap, unless in large quantities, finds a difficulty in mixing with and washing it off; but pot ashes being the lie with which soap is made, this readily mixes with the fat on the skin, dissolves it, and forms itself the best soap for washing. When a dog is placed in water, a desert or table spoonful of pot or pearl ashes may be mixed with a pint of warm water: with this the whole skin should be first rubbed, carefully guarding the eyes from it: when this is done, then wash well with the general quantity of water. This plan is particularly useful where there is any mange or redness of the skin, or many fleas; for by irritating the skin it pro-

motes its removal; but unleſs it is done with care, the quantity of pearl aſhes had better be mixed with the general maſs of water. Waſhing ſhould not be repeated oftener than every third day, and in common caſes three times a fortnight is ſufficient.

Bathing in warm or hot water is of the greateſt ſervice in many caſes of diſeaſe. Plunging into cold water commonly brings a dog inſtantly out of a fit, and afterwards bathing in warm water prevents the return. Bathing in hot water ſubdues or leſſens moſt inflammations, and is the beſt means of overcoming obſtinate coſtiveneſs.

WORMING.

Worming of dogs is practiſed for two purpoſes, and both of them erroneouſly. The one is to prevent them from going mad; or, when mad, from biting; the other to cure them of gnawing improper ſubſtances. It has been ſaid, and is much believed, that when a dog has been wormed, provided he afterwards goes mad, he cannot bite; but worming can be no preventive: the mouth in ſome caſes may become ſo ſwelled from obſtruction or repletion of the ſalivary glands, that the dog cannot cloſe his jaws; but this may happen in a wormed or unwormed dog equally. Worming does not prevent gnawing but as it makes the mouth ſore; hence as ſoon as that is well, the dog returns to his old habits; perhaps not in

an equal degree quite, for if it has been harſhly done, he gets ſomething older before it is well. I therefore conceive this a very uſeleſs practice, and one that will wear away with a greater knowledge of the proper treatment of this animal.

WORMS.

There is no complaint, diſtemper excepted, that deſtroys ſo many dogs as *worms:* almoſt every dog has them at ſome period of his life, and many have them always. There are ſeveral kinds of worms that affect dogs. The *tape worm* is a common kind; and it is not an unuſual circumſtance for a puppy to paſs four or five hundred joints of theſe worms, whoſe united length would encircle the whole body many times. I have ſeen inſtances where one of theſe worms coiled itſelf up into one ball, and ſo made an impenetrable obſtruction, of which the dog died. Another kind is the *long round worm*, ſimilar to the human. Theſe ſometimes crawl from the inteſtines into the ſtomach, and, making the dog ſick, are brought up; at others, they paſs only from the anus; but I have obſerved they more frequently produce fatal effects when brought by the mouth. There is a *third kind*, not much unlike maggots, with red heads: theſe are not ſo frequent as the two former, and I think not ſo fatal. A *fourth kind*, which are

likewiſe leſs fatal, are ſimilar to the human aſcarides, or thread worm.

Worms are particularly fatal to puppies; and when they exiſt in any conſiderable quantities, they commonly deſtroy them. Worms are eaſily detected, even though they ſhould not paſs away; for, when a dog has many worms, his coat always ſtares; he eats voraciouſly, but ſeldom fattens; he has frequently a cough, and in puppies the noſe commonly runs: but the ſtools are the moſt unequivocal ſymptoms; for theſe are commonly looſe, ſlimy, and mixed with froth. Sometimes, when looſe ſtools are the conſequence of worms, on the taking any aſtringent medicine, they become of a proper conſiſtence, but they ſoon return to their former ſtate. The belly likewiſe is often hard, and ſometimes ſwelled. When puppies have worms, the firſt that are paſſed are ſeldom but little noticed, for they ſeem to affect the health but little; but gradually purging becomes more frequent, and the animal, though lively, waſtes, and his hip-bones may be plainly felt, though the ſtaring of the coat may make him ſtill appear fat: the growth likewiſe is completely ſtopped, and in this way it is very common for puppies to continue, till a fit or two carries them off. In grown dogs, worms are leſs fatal, though, from the obſtructions they form, they not unfrequently kill; they likewiſe, in grown dogs, produce fits, the firſt of which

is paſſed over, and little notice is taken till a ſecond appears, and ſo on. It does not follow, becauſe no worms are ſeen to paſs away, that the dog has none; nor, becauſe they are not ſeen, does it follow even that none paſs: for if they remain long after they are dead in the inteſtines, they are digeſted like other animal matter: this is frequently the caſe when dogs take medicines that deſtroy them; for they become digeſted, and paſs away diſſolved.

Worms occaſion ſuch an irritability of the bowels, particularly in young dogs, that ſtrong purging medicines to diſlodge them cannot with ſafety be given. The remedies I make uſe of with the greateſt ſucceſs are the

Worm Powders [page 28], and which in moſt caſes of this kind produce remarkable effects, and are particularly efficacious in the removal of them.

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THE END.

Printed by Knight and Compton,
Middle Street, Cloth Fair.

MANGE IN DOGS.

BY an error, the deſcription of this diſeaſe, which is one of the moſt frequent and troubleſome among all kinds of dogs, does not appear in its proper place in this edition, although referred to in the Index.

Though all dogs are liable to mange, and all appear to catch it with nearly equal eaſe when in contact with an infected dog; yet ſome ſeem more liable to generate it, that is, to have it appear on them without more obvious cauſe than others. The mange does not put on exactly the ſame appearance in all dogs, but it has varieties: two, however, are by far the moſt common and evident, and which are called the Red Mange and the Scabby Mange, though theſe become ſo mixed in their common ſymptoms, that it is not always eaſy to define either the one or the other with great exactneſs.

The Red Mange is the moſt virulent and obſtinate: it is likewiſe, in moſt caſes, more univerſally ſpread over the body; and appears particularly obnoxious to white and wire haired dogs. It alſo ſeems more hereditary and conſtitutional than the ſcabby mange. The principal difference, however, appears to be in the greater heat and redneſs exhibited on the ſkin comparatively with what exiſts in the ſcabby kind; whilſt the exudation from the ſores of the latter is thicker than that from the red, and encruſts faſter.

The Scabby Mange is that kind which is moſt frequently given from one dog to another, and may be occaſioned by filth. The elbows, the inſides of the arms, and particularly along the back, are the chief ſeats of its attack, though, when virulent, it extends over the whole body. It generally breaks out in blotches, which, throwing out a ſerous matter, encruſts and forms ſcabs, which are hid among the hair, and only detected by the dog's ſcratching.

There is a diſeaſe of the ſkin, conſiſting of ſpongy ulcers, from the little pores of which the ſerum or watery part of the blood continually iſſues in the form of a yellow fluid: this is by ſportſmen conſidered as a ſpecies of mange; but it does not give way to the common means whereby that is removed, and it is, in fact, almoſt incurable. The remedies that have the beſt effect on it are mercurial applications of a very powerful kind; but all mercurials in the other kinds of mange are improper.

The Cauſes producing Mange are various. In ſome caſes it is hereditary; and when bitches breed, either having the mange themſelves, or when it exiſted in the dog they bred from, the whelps are commonly ſubject to an early mange, and which in them becomes ſo conſtitutional, that when any thing is done for it, ſoon after it appears completely cured, it comes on again. While bitches are in pup, if they contract

mange, unleſs it is completely removed, the puppies are liable to have it appear ſoon after they are born; but this is not invariably the caſe: mange may be produced by too full feeding, eſpecially if a ſufficient portion of exerciſe is not given to counteract the ill effects. Thus it is that it is ſo prevalent among the pet dogs in large cities: in theſe caſes it leſs ſeldom degenerates into rank mange, from their being kept cleaner; but they are more frequently troubled with the red itching ſtate of the ſkin. Wherever many dogs are confined together, mange almoſt always makes its appearance. Filth of every deſcription is a very common cauſe of mange; hence the dogs of the poor are ſeldom without it. Salt meat, or putrid food of any kind, will produce it. Mange likewiſe is the conſequence of too little food in many inſtances, and almoſt any dog may be ſtarved into it: the mange produced from this cauſe is of a particular kind; depriving the animal totally of hair, and proving highly infectious. Contagion likewiſe is a fruitful ſource of mange, but every ſpecies of it is not equally eaſily caught; nor is it, generally ſpeaking, ſo infectious as is imagined; it is not ſo readily caught from a dog having it conſtitutionally as it is from a dog having himſelf caught it. Fleas, when exiſting in numbers, are very great promoters of the mange, by the irritation they occaſion, and by the

filth they produce; conſequently frequent waſhing and combing is a means of preventing mange.

In ſpring and fall dogs change their coats: to form new hair, more blood than uſual muſt therefore be ſent to the ſkin (for every part of the body, ſolid and fluid, is formed from the blood; and every part is in a continual ſtate of wear and decay, but is reproduced from this ſource): this increaſed quantity of blood in many dogs gives a tendency to inflammation of the ſkin, and which produces the diſpoſition to mange at theſe periods (particularly in ſpring) more than at others; though contagion, full feeding, filth, or want of exercife, may produce it at any time.

THE CURE OF MANGE.

There is but one certain method of curing mange, which is by the application of ſomething to the ſkin itſelf. The lighter caſes of ſimple itching and redneſs of the ſkin may be removed by proper alteratives: the moſt proper are pointed out below. The applications made uſe of to cure mange have often the effect of raiſing a greater inflammation of the ſkin than that already ariſing from mange; and hence, as two inflammations cannot exiſt at the ſame time, the leſs gives way to the greater. In this way, oil of turpentine, cauſtic alkali, alum waſhes, and other ſtrong applications, act; or mange is cured by the application of ſomething that acts as a ſpecific on the

poiſon of the complaint itſelf, without particularly irritating the ſkin. The ſubſtances uſed in this way are various, as arſenic, neurtal ſalts, tar, train oil, tobacco, &c. &c.; but the moſt frequent and general ſubſtance uſed, is ſulphur, and which in moſt caſes is equal to the cure in any form: but ſulphur alone, or any one ſubſtance unaided by others, is ſometimes not equal to the cure of inveterate caſes; nor is any caſe ſo ſpeedily or ſo perfectly cured by any one ſubſtance as by a judicious mixture of ſeveral. By ſeeing many hundred caſes of this diſeaſe under all its varieties, every year, and by giving every ſubſtance a fair trial, I am now become tolerably well aware of the relative efficacy of every thing in common uſe for the cure of this diſeaſe, and of many not in common uſe, and known to myſelf only: and though any of the above ſubſtances may be uſed with ſome ſucceſs, I truſt to one compounded ſubſtance, and which, from my knowledge and experience of it, I can with great truth recommend to all thoſe ſeeking for aſſiſtance in this particular.

Complaints were ſometimes made, that the former light-coloured ointment, vended by my agents, occaſioned ſickneſs in the dogs who licked it. That ointment was a moſt efficacious compoſition; and as in the directions I particularly guarded perſons againſt ſuffering it to be licked off, ſo I ſuppoſed that this

effect could never arife: but as the preventing the licking it off, without great care, was very difficult, fo I have been at great pains to compound an ointment equally efficacious, and yet fo perfectly harmlefs, as that the whole may be licked off without the flighteft prejudice.

This ointment* alone is equal to the cure of every ftate and variety of mange commonly met with: however, where the foulnefs and heat of the body are very great, and the prejudice of the owner is in favour of auxiliaries, they may be tried. Bleeding is by fome perfons thought very beneficial in mange; and when the difeafe is very inveterate, and the dog not much reduced, it may be tried, but it is not eflential.—Changing the food is likewife ufeful; that is, if the dog before ate flefh, he fhould during the cure be fed on vegetables, as potatoes, &c., or bifcuit: if before he was ufed to be fed on thefe latter fubftances, meat during the cure will affift it. Phyfic may fometimes prove ufeful; but *alteratives* form the beft auxiliary in the cure of mange, and are really very afffftant towards cleafing the dog from the internal foulnefs which the mange occafions, and as fuch greatly promote the cure in all cafes, and in early ones alone are equal to the cure.

The alteratives which I make ufe of are fold by the Venders of this Ointment at 2s the fet of half a do-

* Vide page 27.

zen, called the *Alterative Powders for the Mange and other Foulneſs in Dogs*, and are ſo excellent for the above purpoſe, that, in every ſtage of the mange in my own practice, I conſtantly give them; and, as they have no other perceptible effect than keeping the body gently open, they are very convenient: and from being nearly taſteleſs, and readily eaten with food, no trouble attends their exhibition.

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Devizes, Newton, Lowe
Deal, R. Long, J. Shipdem, J. Sharp
Dartford, Hammond
Downham, J. Smith
Dundee, I Allen
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Durham, L. Pennington
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Dublin, Huddleſton, N. Caldwell, Bourſiquoit, Bull
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Guildford, Ruſſel, Waller
Grantham, Tonge, Mitton, Hurſt
Hanley, Allbut
Hitchin, Meers
Holt, Robinſon
Hertford, Simpſon
Hereford, I. Allen, Watkins, Wright
Hambro', Remnant
Helſton, Matthews
Horncaſtle, Weir
Hull, Peck, Browne
Halifax, Millin, Holden
High Wycomb, Wright
Horſham, Mann
Huddersfield, Brook & Lancaſhire
Huntingdon, Jenkinſon
Ilfeworth, S. Clements
Inverneſs, Mackintoſh, Inglis, and Wilſon
Ipſwich, Branſby & Keymer, Hooker, Middleditch and Co.
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Kington, Hereford, T. Bowen

Kelveden, Sparrow
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Wakefield, Wood, Kerſhaw, Moon
Witham, M. Golling, Youngman
Wolverhampton, Simpſon
York, W. Teſſeyman, Peacock, Blanchard, Wolſtenholme, Peck
Yeovil, J. King
Yarmouth, Downs, J. Thompſon.

☞ Mr. BLAINE continues to give his Advice on Horſes and Dogs, at No. 5, Well Street, Oxford Street, where he has opened a ſpacious Infirmary for both.